#### **APPENDIX A**

#### HISTORICAL DATA

#### **SWMU 194**

Summary obtained from

Remedial Investigation Report for Waste Area Grouping 28 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/OR/07-1846/V1 and V4&D1, January 2000

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#### **Summary Report**

#### **SWMU 194 – McGraw Construction Facilities**

Solid Waste Management Unit (SWMU) 194 is a flat, open area outside the security fence near the main plant entrance to the south and west of the C-333 Building. SWMU 194 was the site of the administrative portion of the McGraw construction facilities and was the site of several support facilities during the construction of PGDP. These facilities included an administration building (105,500 ft²), cafeteria (10,200 ft²), security guard headquarters (5360 ft²), hospital (4480 ft²), purchasing building (12,000 ft²), paper and stationary warehouse (3900 ft²), and a boiler house and two leach fields located west of Hobbs Road. All of the buildings have been demolished. The site is bounded on the north by Curlee Road, on the south by Patrol Road 4, and on the east by Patrol Road 5, and extends west of Hobbs Road. The total area is approximately 41.7 acres. It is mostly covered with grasses with a stand of trees to the west. There are no facilities or related development on the site.

Site evaluations of SWMU 194 were undertaken as part of the Northeast Plume Investigation, the Groundwater Phase IV Investigation, and the WAG 28 Remedial Investigation (RI). Eleven borings were completed within the boundaries of SWMU 194. Seven of those borings (194-2, 194-3, 194-5, 194-8, 194-9, 194-10, and 194-11) were completed within the immediate vicinity of the leach fields. Samples collected from borings 194-1 through 194-7 were analyzed for trichloroethene, 1,2-dichloroethene, benzene, toluene, ethylbenzene, xylene, polychlorinated biphenyls (PCBs), total petroleum hydrocarbons, selected metals, and gross alpha/beta. Samples collected from the remaining four borings were only analyzed for metals. No groundwater samples were collected from any of the borings. In addition, because any releases from the leach field would have been to the subsurface soils, no surface soil sampling was deemed necessary for characterization of the SWMU.

Metals detected in the shallow subsurface at SWMU 194 represent both naturally occurring conditions and possible releases to the subsurface. Aluminum was reported at levels ranging from 2,210 to 14,500 mg/kg. These aluminum levels detected at the site are considered to represent naturally occurring concentrations. Strontium was detected in the range of 2.86 to 26 mg/kg, and lithium was detected in the range of 2.11 to 9 mg/kg. Both metals exhibit decreasing concentrations with depth. The detected concentrations for both metals fall within the range for occurrence in natural soils as reported by the U.S. Geological Survey for surface soils in the contiguous United States. Cadmium was detected in the range of 8.55 to 18.1 mg/kg, and lead was detected in the range of 5.03 to 13 mg/kg. However, one sample reported a level of 360 mg/kg. These levels were reported as part of the Northeast Plume and Groundwater Phase IV Investigations and were not confirmed by the WAG 28 RI. As a result it is believed that the elevated levels of these two metals are likely confined to isolated areas. Chrome was detected in all of the samples analyzed. The reported range of chrome in the samples ranged from 7.95 to 103 mg/kg. The chrome reported from the site could represent small isolated releases to the substrate from the leach field.

Ethylbenzene and xylene were both detected in one sample at concentrations slightly above the analytical detection limit. PCBs were not detected in any of the samples analyzed. Gross alpha and gross beta were detected at reportable activities in all the samples analyzed. The maximum concentration reported for gross alpha was 2.5 pCi/g, while that for gross beta was 7.0 pCi/g.

Soil and sediment samples have been collected near Outfall 017. Samples collected and analyzed by the Army Corps of Engineers and U.S. Department of Energy (DOE)-Headquarters did not detect any PCBs. DOE sediment samples for radionuclides at Outfall 017 contained reportable quantities of alpha and beta activity as well as plutonium-239/240, technetium-99, and thorium-230. The alpha and beta activity were measured using two different methods, rad screening and environmental. The highest alpha

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and beta results were 16.38 pCi/g and 7.49 pCi/g, respectively. The analysis for plutonium reported a result at 0.0244 pCi/g, technetium at 0.373 pCi/g, and thorium at 0.684 pCi/g. Additional samples were collected at the K-017 apron and flume. These samples were collected at 0–6 and 6–12 in. intervals. Results from all of these samples indicated uranium concentrations between 2 and 3  $\mu g/g$  at an assay of 0.7%  $^{235}U$ .

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#### **SWMU 194**

| Station: 194-1   Media: SOLID   Depth: 10  | Lab Qualifi<br>and Result   |        |   | Units                                   | Validatio<br>Qualifier |
|--|---|--------|---|---|------------------------|
| 1.2-Dichloroethene   | 01-0036   | 11101  | 0036                                    |   |                        |
| Sample ID:   | LID   | a: SOI |   | Depth: 10                               |                        |
| Sample ID:   | U 5   |        |   |   | w.                     |
| Sample ID:   | U 5   |        | 10.00                                   | ug/kg                                   | XV                     |
| Station: 194-1   Media: SOLID   Depth: 15  | U 5   |        | 1 1 T 1 T 1 T 1 T 1 T 1 T 1 T 1 T 1 T 1 | ug/kg                                   | XV                     |
| Station: 194-1   Media: SOLID   Depth: 15   Scamblum   METAL   13.8   mg/kg   XV   Ead   METAL   Ead   Early   E   | U 5   |        | 5                                       | ug/kg                                   | XV                     |
| Cadmilum   | U 5   |        | 5                                       | ug/kg                                   | XV                     |
| Chromium   | U 1   |        | •                                       | ug/kg                                   | XV<br>XV               |
| April   Apri   |   |        |   | ug/kg                                   | AV                     |
| Station: 194-2   Media: SOL  | 01-0037   | 11101  | 0037                                    |   |                        |
| Part      |   |        |   | Depth: 15                               |                        |
| 1.1-Trichloroethane  |   | . 501  |   | Depin. 15                               |                        |
| Cadmium  | U 5   |        | 200000000000000000000000000000000000000 | mg/kg                                   | XV                     |
| Sample ID:   | 67.8  |        | 67.6                                    | mg/kg                                   | XV                     |
| Sample ID: 1110101-0035  Station: 194-2 Media: SOLID Depth: 5  Cadmium METAL 8.55 mg/kg XV Choomium METAL 15.4 mg/kg XV ead METAL 20.2 mg/kg XV Orchlorinated biphenyl PPCB U 100 ug/kg XV Upha activity RADS 1900 pci/kg XV 1.1.1-richbrorethane VOA  | 9.63  |        | 9.63                                    | mg/kg                                   | XV                     |
| 1,1,1-Trichloroethane  | 2200  |        | 2200                                    | pcVkg                                   | XV                     |
| Station: 194-2 Media: SOLID Depth: 5  Sadmium METAL 8.55 mg/kg XV  | 4000  |        | 4000                                    | pcl/kg                                  | XV                     |
| Cadmium METAL 8.55 mg/kg XV mg | U 1   |        | 1                                       | ug/kg                                   | XV                     |
| thomium METAL 15.4 mg/kg XV mg | U 5   |        | 5                                       | ug/kg                                   | XV                     |
| chromium METAL 15.4 mg/kg XV m | U 5   |        | 5                                       | ug/kg                                   | XV                     |
| ead METAL 20.2 mg/kg XV rolychlorinated biphenyl PPCB U 100 ug/kg XV rolychlorinated biphenyl PPCB U 100 pc/kg XV rolychlorinated biphenyl PPCB U 100 pc/kg XV rolychlorinated biphenyl PPCB XV rol | U 5   |        | 5                                       | ug/kg                                   | XV                     |
| Toluene VOA Interpretation of the property of  | U 5   |        | 5                                       | ug/kg                                   | XV                     |
| Interpretable of the properties of the propertie | U 5   |        | 5                                       | ug/kg                                   | XV                     |
| Station: 194-2  METAL  U 5 mg/kg XV  Station: 194-2  Media: SOLID  Depth: 10  Sample ID: 111010  Depth: 10  Depth: | UI  |        | 1                                       | ug/kg                                   | XV                     |
| .1.1-Trichloroethane VOA U 1 ug/kg XV .2-Dichloroethane VOA U 5 ug/kg XV lenzene VOA U 5 ug/kg XV lenzene VOA U 5 ug/kg XV lenzene VOA U 5 ug/kg XV oluene VOA U 1 ug/kg XV Ichloroethane VOA U 1 ug/kg XV  Station: 194-2 Media: SOLID Depth: 10  Station: 194-2 Media: SOLID Depth: 10  admium METAL U 5 mg/kg XV thromium METAL U 5 mg/kg XV ead METAL 13.6 mg/kg XV loha activity RADS  Benzene VOA  Ethylbenzene VOA  Linethylbenzene VOA  Ethylbenzene VOA  Linethylbenzene VOA  Ethylbenzene VOA  Linethylbenzene VOA  Linethylbenzene VOA  Ethylbenzene VOA  Toluene VOA   | 1. 0020   |        | 1020                                    |   |                        |
| 2-Dichloroethene VOA U 5 ug/kg XV lenzene VOA U 5 ug/kg XV limethylbenzene VOA U 5 ug/kg XV limethylbenzene VOA U 5 ug/kg XV limethylbenzene VOA U 5 ug/kg XV lotuene VOA U 5 ug/kg XV lotuene VOA U 1 lotuere VOA lotuene VOA U 1 lotuere VOA lo | 11-0029   | 111010 | 029                                     |   |                        |
| enzene VOA U 5 ug/kg XV limethylbenzene VOA U 5 ug/kg XV limethylbenzene VOA U 5 ug/kg XV limethylbenzene VOA U 5 ug/kg XV lead METAL Lead METAL Lead METAL Lead METAL Lead METAL Lead METAL Polychlorinated bliphenyl PPCB Alpha activity RADS  Sample ID: 1110101-0036  Station: 194-2 Media: SOLID Depth: 10  admium METAL U 5 mg/kg XV lead METAL  | ID  | : SOL  |   | Depth: 5                                |                        |
| IntelliyIbenzene VOA U 5 ug/kg XV thylbenzene VOA U 5 ug/kg XV ug/kg XV thylbenzene VOA U 5 ug/kg XV thylbenzene VOA U 5 ug/kg XV thylbenzene VOA U 1 ug/kg XV thylbenzene U 5 mg/kg XV thylbenzene VOA U 5 mg/kg XV thylbenzene U 5 mg/kg XV thylbenzene U 5 thylbenzene VOA U 5 thylbenzene U 5 thylbenzene VOA U 5 thylbenzene U 5 thylbenzene VOA U 5 thylbenzene U 5 thylbe | U 5   |        | -                                       | 78                                      | 12.00                  |
| thylbenzene VOA U 5 ug/kg XV oluene VOA U 5 ug/kg XV U 1 ug/kg  | 10 To |        |   | mg/kg                                   | XV                     |
| Sample ID: 1110101-0036  Station: 194-2 Media: SOLID Depth: 10  admium METAL U 5 mg/kg XV  homium METAL 13.6 mg/kg XV  ead METAL 6.41 mg/kg XV  lipha activity RADS  Bela activity RADS  1,1,1-Trichloroethene VOA  1,2-Dichloroethene VOA  Benzene VOA  Dimethylbenzene VOA  Ethylbenzene VOA  Ethylbenzene VOA  Toluene VOA  | 19.7  |        |   | mg/kg                                   | xv                     |
| Sample ID: 1110101-0036  Station: 194-2 Media: SOLID Depth: 10  admium METAL U 5 mg/kg XV Benzene VOA  hromium METAL 13.6 mg/kg XV Benzene VOA  Benzene VOA  Dimethylbenzene VOA  Ethylbenzene VOA  Ethylbenzene VOA  Ethylbenzene VOA  Toluene VOA  | 7.17<br>U 100   |        |   | mg/kg                                   | XV                     |
| Sample ID: 1110101-0036  Station: 194-2 Media: SOLID Depth: 10  admium METAL U 5 mg/kg XV hromium METAL 13.6 mg/kg XV ead METAL 6.41 mg/kg XV lpha activity RADS 1800 pol/kg XV lpha activity RADS 1800 pol/kg XV Toluene VOA  | 1800  |        | 55 67 Bross                             | ug/kg                                   | XV                     |
| Station: 194-2 Media: SOLID Depth: 10  admium METAL U 5 mg/kg XV hromium METAL 13.6 mg/kg XV ead METAL 6.41 mg/kg XV lpha activity RADS 1800 pcd/kg XV Toluene VOA  1,1,1-Trichloroethane VOA 1,2-Dichloroethane VOA Benzene VOA Dimethylbenzene VOA Ethylbenzene VOA Toluene VOA  | 6000  |        |   | pci/kg                                  | XV                     |
| Station: 194-2 Media: SOLID Depth: 10  admium METAL U 5 mg/kg XV Bead METAL 13.6 mg/kg XV Bloha activity RADS 1800 pct/kg XV Toluene VOA  1,2-Dichloroethene VOA  Benzene VOA  Dimethytbenzene VOA  Ethylbenzene VOA  Toluene VOA  | U 1   |        |   | pcl/kg                                  | xv                     |
| admium METAL U 5 mg/kg XV Benzene VOA Dimethylbenzene VOA Dimethylbenzene VOA Ethylbenzene VOA Ethylbenzene VOA Dipha activity RADS 1800 pcd/kg XV Toluene VOA   | U 5   |        |   | ug/kg                                   | XV                     |
| me fal. 0 5 mg/kg XV Dimethylbenzene VOA sad METAL 13.6 mg/kg XV Ethylbenzene VOA pha activity RADS 1800 pc4/kg XV Toluene VOA   | U 5   |        |   | ug/kg                                   |                        |
| ead METAL 6.41 mg/kg XV Ethylbenzene VOA pha activity RADS 1800 pc4kg XV Toluene VOA   | U 5   |        |   | ug/kg<br>ug/kg                          | XV<br>XV               |
| Ipha activity RADS 1800 polike XV Toluene VOA  | U 5   |        | .553                                    | 200000000000000000000000000000000000000 | XV                     |
| pha activity RADS 1800 pc/kg XV II   | U 5   |        | -57                                     | ug/kg                                   |                        |
|  | UI  |        |   | ug/kg                                   | XV                     |
| ela activity RADS 5000 pcl/kg XV (Inclativoetname VOA U 1 ug/kg XV   | U 1   |        | 1                                       | ug/kg                                   | XV                     |

#### **SWMU 194**

| Analyte  | Analysis  |         | b Qualifier<br>i Result | Units       | Validation<br>Qualifier | Analyte              |   | Analysis |           | b Qualifler<br>d Result | Units        | Validation<br>Qualifier |
|--|-----------|---------|-------------------------|-------------|-------------------------|----------------------|---|----------|-----------|-------------------------|--------------|-------------------------|
| Sampl  | e ID: 11  | 10101-0 | 030                     |             |                         | 1                    | Sample .                                | ID:      | 1110101-0 | 0032                    |              |                         |
| Station: 194-3   | Media:    | SOLID   |                         | Depth: 5.5  |                         | Station: 194         | 1-3                                     | Medi     | a: SOLID  |                         | Depth: 10.5  | 5                       |
| Cadmium  | METAL     | U       | 5                       | mg/kg       | xv                      | Dimethylbenzane      |   | VOA      | U         | 5                       |              |                         |
| Chromlum   | METAL     |         | 13                      | mg/kg       | XV                      | Ethylbenzene         |   | VOA      | U         | 5                       | ug/kg        | XV                      |
| ead  | METAL     | U       | 5                       | mg/kg       | xv                      | Toluene              |   | VOA      | Ü         | 5                       | ug/kg        | XV                      |
| Polychlorinated biphenyl   | PPCB      | U       | 100                     | ug/kg       | XV                      | Trichloroethene      |   | VOA      | Ü         | 1                       | ug/kg        | XV                      |
| Alpha activity   | RADS      |         | 2300                    | pcl/kg      | XV                      | THORNOCOUNGER        |   | VUA      |           |                         | ug/kg        | XV                      |
| Beta activity  | RADS      |         | 5000                    | pcl/kg      | XV                      | 11                   | Sample 1                                | D:       | 1110101-0 | 0033                    |              |                         |
| 1,1,1-Trichloroethane  | VOA       | U       | 1                       | ug/kg       | XV                      | Station: 194         | 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |          | a: SOLID  |                         |              |                         |
| ,2-Dichloroethene  | VOA       | U       | 5                       | ug/kg       | XV                      | 01011011. 154        | -3                                      | meun     | a. SOLID  |                         | Depth: 15    |                         |
| Benzene  | VOA       | U       | 5                       | ug/kg       | XV                      | Cadmium              |   | METAL    | U         | 5                       | mg/kg        | XV                      |
| Dimethylbenzono  | VOA       | Ü       | 5                       | ug/kg       | XV                      | Chromium             |   | METAL    |           | 103                     | mg/kg        | XV                      |
| thylbenzene  | VOA       | U       | 5                       | ug/kg       | xv                      | Lead                 |   | METAL    |           | 9.55                    | mg/kg        | XV                      |
| oluene   | VOA       | U       | 5                       | ug/kg       | XV                      | Alpha activity       |   | RADS     |           | 1500                    | pcl/kg       | XV                      |
| richloroethene   | VOA       | Ü       | i                       | ug/kg       | XV                      | Bete activity        |   | RADS     |           | 5000                    | pci/kg       | XV                      |
| All the second s |           |         | 20000                   | opra        |                         | 1,1,1-Trichloroetha  | ne                                      | VOA      | U         | 1                       | ug/kg        | XV                      |
| Sample   | : ID: 111 | 10101-0 | 031                     |             |                         | 1,2-Dichloroethene   |   | VOA      | U         | 5                       | ug/kg        | xv                      |
| Station: 194-3   | Media:    | SOLID   |                         | Depth: 10   |                         | Benzene              |   | VOA      | U         | 5                       | ug/kg        | xv                      |
|  |           |         |                         | Deptil. 10  |                         | Dimethylbenzene      |   | VOA      | Ü         | 5                       | ug/kg        | xv                      |
| admium   | METAL     | U       | 5                       | mg/kg       | XV                      | Ethylbenzene         |   | VOA      | Ü         | 5                       | ug/kg        | xv                      |
| Chromium   | METAL     |         | 12.1                    | mg/kg       | XV                      | Toluene              |   | VOA      | Ū.        | 5                       | ug/kg        | xv                      |
| ead  | METAL     | U       | 5                       | mg/kg       | XV                      | Trichtoroethene      |   | VOA      | Ü         | ĭ                       | ug/kg        | xv                      |
| lpha activity  | RADS      |         | 1500                    | pcl/kg      | XV                      |                      |   |          |           |                         | ugvig        | AY                      |
| ela activity   | RADS      |         | 3000                    | pcl/kg      | XV                      |                      | Sample I                                | D: 1     | 1110101-0 | 034                     |              |                         |
| ,1,1-Trichloroethane   | VOA       | U       | 1                       | ug/kg       | XV .                    | Station: 194-        | .3                                      | Madia    | : SOLID   |                         | Danill. 45.5 |                         |
| ,2-Dichloroethene  | VOA       | U       | 5                       | ug/kg       | XV                      |                      |   | meura    | . SOLID   |                         | Depth: 15.5  |                         |
| enzene   | VOA       | U       | 5                       | ug/kg       | XV                      | Cadmium              |   | METAL    | U         | 5                       | mg/kg        | XV                      |
| imethylbenzene   | VOA       | U       | 5 .                     | ug/kg       | xv                      | Chromium -           |   | METAL    |           | 51.7                    | mg/kg        | XV                      |
| thyfbenzene  | VOA       | U       | 5                       | ug/kg       | XV                      | Lead                 |   | METAL    | U         | 5                       | mg/kg        | XV                      |
| oluene   | VOA       | ŭ       | 5                       | ug/kg       | XV                      | Alpha activity       |   | RADS     | - 5       | 1900                    | pci/kg       | xv                      |
| richloroethene   | VOA       | ŭ       | 1                       | ug/kg       | xv                      | Bela activity        |   | RADS     |           | 6000                    | pcl/kg       | xv                      |
|  |           |         | -                       | olivi.      | NT.                     | 1,1,1-Trichloroethan | 10                                      | VOA      | U         | 1                       | ug/kg        | xv                      |
| Sample   | ID: 111   | 0101-00 | )32                     |             | **                      | 1,2-Dichloroethene   |   | VOA      | U         | 5                       | ug/kg        | XV                      |
| Station: 194-3   | Media:    | SOLID   |                         | Depth: 10.5 |                         | Benzene              |   | VOA      | ŭ         | 5                       | ug/kg        | xv                      |
|  |           |         |                         | July 10.5   |                         | Dimethylbenzene      |   | VOA      |           | 5                       | ug/kg        | XV                      |
| admium   | METAL     | U       | 5                       | mg/kg       | XV                      | Ethylbenzene         |   | VOA      | U         | 5                       | ug/kg        | xv                      |
| hromium  | METAL     |         | 12.7                    | mg/kg       | XV                      | Toluene              |   | VOA      | ŭ         | 5                       | ug/kg        | xv                      |
| bad  | METAL     |         | 360                     | mg/kg       | XV                      | Trichloroethene      |   | VOA      | ŭ         | ī                       | ug/kg        | XV                      |
| lpha activity  | RADS      |         | 1800                    | pci/kg      | XV                      |                      |   |          |           |                         | ng ky        | VA                      |
| eta activity   | RADS      |         | 3000                    | pcl/kg      | XV                      | j S                  | ample I                                 | D: 1     | 110101-0  | 026                     |              |                         |
| 1,1-Trichloroethane  | VOA       | U       | 1                       | ug/kg       | XV                      | Station: 194-        |   |          | : SOLID   |                         | Donth: 5     |                         |
| 2-Dichloroethene   | VOA       | U       | 5                       | ug/kg       | XV                      |                      | *                                       | meula    | . JOLID   | 5.5                     | Depth: 5     |                         |
| enzene   | VOA       | U       | 5                       | ug/kg       | xv                      | Cadmium              | 1                                       | METAL    | U         | 5                       | mg/kg        | XV                      |

#### **SWMU 194**

| Analyte                          | Analysis  | 40         | b Qualifier<br>d Result | Units     | Validation<br>Qualifier | Analyte                  | Analysis |          | b Qualifler<br>i Result | Units     | Validation<br>Qualifier |
|----------------------------------|-----------|------------|-------------------------|-----------|-------------------------|--------------------------|----------|----------|-------------------------|-----------|-------------------------|
| Samp<br>Station: 194-4           |           | 10101-0    | 0026                    |           |                         | Sampl                    |          | 10101-0  | 039                     |           |                         |
|                                  |           | SOLID      |                         | Depth: 5  |                         | Station: 194-5           | Media:   | SOLID    |                         | Depth: 5  |                         |
| Chromium                         | METAL     |            | 14.7                    | mg/kg     | XV                      | Cadmium                  | METAL    | U        | 5                       | mg/kg     | xv                      |
| Lead                             | METAL     |            | 8.63                    | mg/kg     | XV                      | Chromium                 | METAL    | •        | 17.1                    | mg/kg     | xv                      |
| Alpha activity                   | RADS      |            | 1400                    | pcl/kg    | . XV                    | Lead                     | METAL    |          | 5.03                    | mg/kg     | xv                      |
| Beta activity                    | RADS      |            | 4000                    | pcl/kg    | XV                      | Polychlorinated biphenyl | PPCB     | U        | 100                     | ug/kg     | XV                      |
| Benzene                          | VOA       | U          | 5                       | ug/kg     | XV                      | Alpha activity           | RADS     |          | 1400                    | pcl/kp    | XV                      |
| Dimethylbenzene                  | VOA       | U          | 5                       | ug/kg     | XV                      | Beta activity            | RADS     |          | 4000                    | pcl/kg    | xv                      |
| Ethylbenzene                     | VOA       | U          | 5                       | ug/kg     | XV                      | 1,1,1-Trichloroethane    | VOA      | U        | 1                       | ug/kg     | xv                      |
| Toluene                          | VOA       | U          | 5                       | ug/kg     | XV                      | 1,2-Dichloroethene       | VOA      | ŭ        | 5                       | ug/kg     | XV                      |
| C                                | I. ID. 11 | 10101 0    | 022                     |           |                         | Benzene                  | VOA      | ŭ        | 5                       |           |                         |
| Samp                             | te ID: 11 | 10101-0    | 027                     |           |                         | Dimethylbenzene          | VOA      | Ü        |                         | ug/kg     | XV                      |
| Station: 194-4                   | Media:    | SOLID      |                         | Depth: 10 |                         | Ethylbenzene             | VOA      | Ü        |                         | ug/kg     | XV                      |
| Cadmium                          |           | VV         |                         |           |                         | Toluene                  | VOA      | Ü        |                         | ug/kg     | XV                      |
| Chromium                         | METAL     | U          | 5                       | mg/kg     | XV                      | Trichloroethene          | VOA      | Ü        |                         | ug/kg     | XV                      |
|                                  | METAL     |            | 13.8                    | mg/kg     | XV                      | Thorotopinesia           | VUA      |          | 1                       | ug/kg     | XV                      |
| ead                              | METAL     |            | 7.4                     | mg/kg     | XV                      | Sample                   | e ID: 11 | 10101-0  | 040                     |           |                         |
| Alpha activity                   | RADS      |            | 1800                    | pci/kg    | XV                      | Station: 194-5           |          |          | 010                     |           |                         |
| Beta activity                    | RADS      |            | 7000                    | pcl/kg    | XV                      | 31811011: 194-5          | Media:   | SOLID    |                         | Depth: 10 |                         |
| 1,1,1-Trichloroethane            | VOA       | U          | 1                       | ug/kg     | XV                      | Cadmium                  | METAL    | U        | 5                       | mg/kg     | XV                      |
| ,2-Dichloroethene                | VOA       | U          | 5                       | ug/kg     | XV                      | Chromlum                 | METAL    |          | 17.2                    | mg/kg     | XV                      |
| Benzene                          | VOA       | U          | 5                       | ug/kg     | XV                      | Lead                     | METAL    |          | 10.3                    | mg/kg     | XV                      |
| Dimethylbenzene                  | VOA       | U          | 5                       | ug/kg     | XV                      | Alpha activity           | RADS     |          | 1500                    | pci/kg    | XV                      |
| thylbenzene                      | VOA       | U          | 5                       | ug/kg     | XV                      | Beta activity            | RADS     |          | 3000                    | pci/kg    | xv                      |
| oluene                           | VOA       | U          | 5                       | ug/kg     | XV                      | 1,1,1-Trichloroethane    | VOA      | U        | 1                       | ug/kg     | XV                      |
| richloroethene                   | VOA       | U          | _1                      | ug/kg     | XV                      | 1,2-Dichloroethene       | VOA      | U        | 5                       | ug/kg     | XV                      |
| Sampl                            | . In. 11  | 10101-0    | 020                     |           |                         | Benzene                  | VOA      | ŭ        | 5                       | ug/kg     | XV                      |
|                                  | elD: III  | 10101-0    | 028                     |           |                         | Dimethylbenzene          | VOA      | ŭ        | 5                       |           |                         |
| Station: 194-4                   | Media:    | SOLID      |                         | Depth: 15 |                         | Ethylbenzene             | VOA      | ü        | 5                       | ug/kg     | XV                      |
| admium                           | METAL     |            |                         |           |                         | Toluene                  | VOA      | Ü        | 5                       | ug/kg     | XV                      |
| Chromium                         | METAL     | U          | 5                       | mg/kg     | XV                      | Trichioroethene          | VOA      | ŭ        | ·                       | ug/kg     | XV                      |
| ead                              |           |            | 12.2                    | mg/kg     | XV                      |                          |          |          | -                       | ug/kg     | XV                      |
| 5550 SSW                         | METAL     | U          | 5                       | mg/kg     | XV                      | Sample                   | : ID: 11 | 10101-00 | 041                     |           |                         |
| lpha activity                    | RADS      |            | 2400                    | pci/kg    | XV                      | Station: 194-5           | Media:   |          | 0.0411                  | D         |                         |
| ela activity<br>2-Dichloroethene | RADS      | 2000       | 5000                    | pci/kg    | XV                      |                          | modia:   | SOLID    |                         | Depth: 15 |                         |
|                                  | VOA       | U          | 5                       | ug/kg     | XV                      | Cadmlum                  | METAL    | U        | 5                       | mg/kg     | XV                      |
| enzene                           | VOA       | U          | 5                       | ug/kg     | XV                      | Chromium                 | METAL    |          | 21.9                    | mg/kg     | XV                      |
| methylbenzene                    | VOA       | U          | 5                       | ug/kg     | XV                      | Lead                     | METAL    |          | 6.29                    | mg/kg     | XV                      |
| thylbenzene                      | VOA       | U          | 5                       | ug/kg     | XV                      | Alpha activity           | RADS     |          | 1200                    | pci/kg    | xv                      |
| oluene                           | VOA       | U          | 5                       | ug/kg     | XV                      | Beta activity            | RADS     |          | 5000                    | pcl/kg    | xv                      |
| richloroethene                   | VOA       | U          | 1                       | ug/kg     | XV                      | 1,1,1-Trichloroethane    | VOA      | U        | 1                       | ug/kg     | xv                      |
|                                  |           | 1975656174 | 77                      |           |                         | 1,2-Dichlorpethene       | VOA      | ŭ        | 5                       | ug/kg     | xv                      |
|                                  |           |            |                         |           |                         |                          |          |          |                         |           | AV                      |

#### **SWMU 194**

| Analyte                  | Analysis   |          | Qualifier<br>Result | Units            | Validation<br>Qualifier | Analyte                          |        | Analysis |          | b Qualifier<br>d Result | Units                                   | Validation<br>Qualifier |
|--------------------------|------------|----------|---------------------|------------------|-------------------------|----------------------------------|--------|----------|----------|-------------------------|---|-------------------------|
| Sampl                    | e ID: 1110 | 0101-0   | 014                 |                  |                         | San                              | uple . | ID: 1    | 110101-0 | 0016                    |   |                         |
| Station: 194-6           | Media: S   | SOLID    |                     | Depth: 5         |                         | Station: 194-6                   | •      |          | SOLID    |                         | Depth: 15                               |                         |
| Cadmium                  | METAL      | U        | 5                   | mg/kg            | xv                      | Dimethylbenzene                  |        | VOA      |          |                         | 10                                      | 2000                    |
| Chromium                 | METAL.     |          | 19                  | mg/kg            | XV                      | Ethylbenzene                     |        | VOA      | U        | 5                       | ug/kg                                   | XV                      |
| Lead                     | METAL      |          | 7.87                | mg/kg            | XV                      | Toluene                          |        | 05/205   | U        | 5                       | ug/kg                                   | XV                      |
| Polychlorinated biphenyl | PPCB       | U        | 100                 | ug/kg            | XV                      | Trichloroethene                  |        | VOA      | U        | 5                       | nB/kB                                   | XV                      |
| Alpha activity           | RADS       | - E      | 1600                | pci/kg           | xv                      | Thoriordensens                   |        | VOA      | U        | 1                       | ug/kg                                   | XV                      |
| Beta activity            | RADS       |          | 6000                | pcl/kg           | XV                      | San                              | nple I | D: 11    | 10101-0  | 0000                    |   |                         |
| 1,1,1-Trichloroethane    | VOA        | U        | 1                   | ug/kg            | xv                      | 11                               |        |          |          | 007                     |   |                         |
| 1,2-Dichloroethene       | VOA        | ŭ        | 5                   | 5 to 5 to 5 to 5 | xv                      | Station: 194-7                   |        | Media:   | SOLID    |                         | Depth: 10                               |                         |
| Benzene                  | VOA        | ŭ        | 5                   | ug/kg            | XV                      | Cadmium                          |        | METAL    | U        | 5                       | mg/kg                                   | XV                      |
| Dimethylbenzene          | VOA        | ŭ        | 5                   | ug/kg            |                         | Chromlum                         |        | METAL    | -        | 22.2                    | mg/kg                                   | XV                      |
| Ethylbenzene             | VOA        | ŭ        | 5                   | ug/kg            | XV                      | Lead                             |        | METAL    |          | 13                      | mg/kg                                   |                         |
| Toluena                  | VOA        | ŭ        |                     | ug/kg            | XV                      | Alpha activity                   |        | RADS     |          | 2300                    | 300 C C C C C C C C C C C C C C C C C C | XV                      |
| Trichloroethene          | VOA        | ŭ        | 5                   | ug/kg            | XV                      | Bela activity                    |        | RADS     |          | 4000                    | pcl/kg                                  | XV                      |
| Theracroelliene          | VOA        | <u> </u> | -1                  | ug/kg            | xv                      | 1,1,1-Trichloroethane            |        | VOA      |          | 4000                    | pci/kg                                  | XV                      |
| Sample                   | ID: 1110   | 101-0    | 015                 |                  |                         | 1,2-Dichloroethene               |        | VOA      | U        | ;                       | ug/kg                                   | XV                      |
| Station: 194-6           |            |          | ,,,                 | 2                |                         | Benzene                          |        |          | U        | 5                       | ug/kg                                   | XV                      |
| Station: 194-0           | Media: S   | OLID     |                     | Depth: 10        |                         | Dimethylbenzene                  |        | VOA      | Ü        | 5                       | ug/kg                                   | XV                      |
| Cadmium                  | METAL      | U        | 6                   | mg/kg            | XV                      | Ethylbenzene                     |        | VOA      | U        | 5                       | ug/kg                                   | XV                      |
| Chromium                 | METAL      |          | 18.6                | mg/kg            | XV                      |                                  |        | VOA      | 4.0      | 15                      | ug/kg                                   | XV                      |
| ead                      | METAL      |          | 8.53                | mg/kg            | xv                      | Toluene                          |        | VOA      | U        | 5                       | ug/kg                                   | XV                      |
| Alpha activity           | RADS       |          | 1500                | pcl/kg           | XV                      | Trichloroethene                  |        | VOA      | U        | _1                      | ug/kg                                   | xv                      |
| Bela activity            | RADS       |          | 5000                | pci/kg           | xv                      | San.                             | ple I  | D. 11    | 10101-0  | nın                     |   |                         |
| .1,1-Trichloroethane     | VOA        | U        | 1                   | ug/kg            | XV                      |                                  | pic z  |          |          | 010                     |   |                         |
| ,2-Dichloroethene        | VOA        | ŭ        | 5                   |                  | XV                      | Station: 194-7                   |        | Media:   | SOLID    |                         | Depth: 15                               |                         |
| Benzene                  | VOA        | U        | 5                   | ug/kg            | XV                      | Cadmium                          |        | METAL    | U        | 5                       | mg/kg                                   | xv                      |
| Dimethylbenzene          | VOA        | Ü        | 5                   | ug/kg            |                         | Chromium                         |        | METAL    |          | 17                      | mg/kg                                   | xv                      |
| thylbenzene              | VOA        | ŭ        | 5                   | ug/kg            | XV                      | Lead                             |        | METAL    |          | 6.84                    | 5 C T C T                               | xv                      |
| oluene                   | VOA        | Ü        | 5                   | ug/kg            | XV                      | Alpha activity                   |        | RADS     |          | 2100                    | mg/kg<br>pci/kg                         | XV                      |
| richloroethene           | VOA        | Ü        |                     | ug/kg            | xv                      | Bela activity                    |        | RADS     |          | 5000                    | pcl/kg                                  | XV                      |
|                          |            |          |                     | ug/kg            | XV                      | 1,1,1-Trichloroethane            |        | VOA      | U        | 1                       |   | 17/10/0                 |
| Sample                   | ID: 1110   | 101-00   | 116                 |                  |                         | 1,2-Dichloroethene               |        | VOA      | Ü        | 5                       | ug/kg                                   | XV                      |
| Station: 194-6           |            |          |                     | -                |                         | Benzene                          |        | VOA      | Ü        |                         | ug/kg                                   | XV                      |
| Station: 194-0           | Media: SC  | DLID     |                     | Depth: 15        |                         | Dimethylbenzens                  |        | VOA      | U        | 5                       | ug/kg                                   | XV                      |
| admium                   | METAL      | U        | 5                   | mg/kg            | xv                      | Ethylbenzene                     |        | VOA      | U        | 5                       | ug/kg                                   | XV                      |
| Chromium                 | METAL      | 0.00     | 15.5                | mg/kg            | XV                      | Toluene                          |        |          | -        | 5                       | ug/kg                                   | XV                      |
| ead                      | METAL      |          | 8.42                | mg/kg            | xv                      | Trichloroethene                  |        | VOA      | U        | 5                       | ug/kg                                   | XV                      |
| lpha activity            | RADS       |          | 2500                | pci/kg           | XV                      | rikawioremene                    | -      | VOA      | U        |                         | ug/kg                                   | XV                      |
| eta activity             | RADS       |          | 4000                | pci/kg           | XV                      | Sam                              | ple I  | D: 11    | 10101-00 | 2/3                     |   |                         |
| 1,1-Trichloroethane      | VOA        | U        | 1                   |                  | 33230                   | The second process of the second | P.C 11 |          |          |                         |   |                         |
| ,2-Dichloroethene        | VOA        | Ü        | 5                   | ug/kg            | XV                      | Station: 194-7                   |        | Media:   | SOLID    |                         | Depth: 5                                |                         |
| enzene                   | VOA        | Ü        | 5                   | ug/kg            | xv                      | Cadmium                          | 1      | METAL    | U        | 5                       | mate                                    | ~,                      |
| ige 129 of 141           | 40A        | U        | 3                   | ug/kg            | XV                      |                                  |        | THE THE  | U        | 9                       | mg/kg                                   | XV                      |

**SWMU 194** 

| Analyte               | Analysis   |        | Qualifier<br>Result | Units    | Validation<br>Qualifier |
|-----------------------|------------|--------|---------------------|----------|-------------------------|
| Samp                  | de ID; 111 | 0101-0 | 013                 |          |                         |
| Station: 194-7        | Media:     | SOLID  |                     | Depth: 5 |                         |
| Chromlum              | METAL      |        | 18.1                | mg/kg    | xv                      |
| Lead                  | METAL      |        | 12.3                | mg/kg    | XV                      |
| Alpha activity        | RADS       |        | 2400                | pcl/kg   | XV                      |
| Beta activity         | RADS       |        | 6000                | pcl/kg   | XV                      |
| 1,1,1-Trichloroethane | VOA        | U      | 1                   | ug/kg    | XV                      |
| 1,2-Dichloroethene    | VOA        | v      | 5                   | ug/kg    | XV                      |
| Benzene               | VOA        | U      | 5                   | ug/kg    | XV                      |
| Dimethylbenzene       | VOA        | U      | 6                   | ug/kg    | XV                      |
| Ethylbenzene          | VOA        | U      | 5                   | ug/kg    | XV                      |
| Toluene               | VOA        | U      | 6                   | ug/kg    | XV                      |
| Trichloroethene       | VOA        | U      | 1                   | ug/kg    | XV                      |

Table 4.19 Inorganic compounds detected above BG in soil at SWMU 194

| Sample ID       | Sample Interval<br>(ft bgs)<br>Top Bottom |             | Analytic   | Analytical Compound |         | Lab<br>Qualifler | Validation |            | BG (mg/kg |
|-----------------|---|-------------|------------|---------------------|---------|------------------|------------|------------|-----------|
| 194008SA005     | 2   | 5           | Beryllium  | ·                   | (mg/kg) |                  |            | Assessment |           |
|                 | 2   | 5           | Calcium    |                     | 6810    | NW               | ×          |            | 0.69      |
|                 | 2   |             | Chromlum   |                     | 13.4    | MYY              | ×          |            | 6100      |
|                 | 2   |             | Lithium    |                     | 8.1**   |                  | ×          |            | 43        |
|                 | 2   |             | Strontlum  |                     | 26      |                  | X          |            | N/A       |
|                 | 2   | 11 (1955) 1 | Zinc       |                     | 62.6    | *N               | X          |            | N/A       |
| 94008SA010      | 7   | 233         | Chromium   |                     |         | •и               | X          |            | 60        |
|                 | 7   |             | Lithium    |                     | 14.4    |                  | ×          |            | 43        |
| 39              | 7   | 4.0         | Strontium  |                     | 6.86**  | 9389             | X          |            | N/A       |
| 94008SA015      | 12  | 1997        | Chromlum   |                     | 15.9    | .и               | ×          |            | N/A       |
|                 | 12  | 335         | Lithium    |                     | 11.7    |                  | ×          | 200        | 43        |
|                 | 12  |             |            |                     | 4.69**  |                  | ×          |            | N/A       |
| 94009SA005      |   |             | Strontium  | 22                  | 7.12    | <b>.</b> N       | ×          |            | N/A       |
| - TOO S G TOO S | 2   |             | Berylilum  |                     | 0.73    |                  | X          |            | 0.69      |
|                 | 2   |             | Chromium   |                     | 15.4    |                  | ×          |            | 43        |
|                 | 2   |             | Lithium    |                     | 8.75**  |                  | ×          |            | N/A       |
| 94009SA010      | 2   |             | Strontlum  | 12                  | 17      | .N               | ×          |            | N/A       |
| 910092W010      | 7   |             | Chromlum   | 12                  | 13.5    |                  | X          |            | 43        |
|                 | 7   | 10          | Lithium    | 6/3                 | 6.87**  |                  | ×          |            | N/A       |
|                 | 7   | 10          | Strontlum  | 178.4               | 13.4    | 'N               | ×          |            | N/A       |
| 94009SA015      | 12  | 15          | Chromlum   | W 15 (%)            | 8.25    |                  | ×          |            | 43        |
|                 | 12  | 15          | Lithlum    |                     | 2.11**  |                  | ×          |            | AVA       |
|                 | 12  | 15          | Strontlum  | - 0                 | 4.4     |                  | ×          |            | N/A       |
| 04009SD015      | 12  | 15          | Chromium   |                     | 11.5    | *                | ×          |            | 43        |
|                 | 12  | 15          | Lithium    | . A                 | 3.23**  |                  | x          |            | N/A       |
|                 | 12  | 15          | Strontium  |                     | 5.44    |                  | x          |            | N/A       |
| 94010SA005      | 2   | 5           | Aluminum . | 200                 | 14500** | .MM.             | ×          |            | 12000     |

<sup>\*\* -</sup> Result exceeds EPA's soil screening values, Recommended Dietary Allowances for children or comparison values do not exist for analyte.

N/A - Background value does not exist

Table 4.19 Inorganic compounds detected above BG in soil at SWMU 194

|                    |      | Interval<br>bgs) |                     |            |             | Results | 1.4              | V-II-II-II                              |            |
|--------------------|------|------------------|---------------------|------------|-------------|---------|------------------|---|------------|
| Sample ID          | Тор  | Bottom           | Analytical Compound | Laboratory | Method      | (mg/kg) | Lab<br>Qualifier | Validation Data<br>Qualifier Assessment | BG (mg/kg) |
| 194010SA005        | 2    | 5                | Beryllium           | PGDP       | SW846-6010A | 0.83    |                  | X                                       | 0.69       |
|                    | 2    | 5                | Chromium            | PGDP       | SW846-6010A | 17.4    |                  | x                                       | 43         |
|                    | 2    | 5                | Lithium             | PGDP       | SW846-6010A | 9**     |                  | ×                                       | N/A        |
|                    | 2    | 5                | Magnesium           | PGDP       | SW846-6010A | 2330    | 'NW              | x                                       | 2100       |
|                    | 2    | 5                | Sodium              | PGOP       | SW846-6010A | 364     |                  | x                                       | 340        |
|                    | 2    | 5                | Strontium           | PGDP       | SW846-6010A | 16.8    | 'N               | x                                       | N/A        |
|                    | 2    | 5                | Zinc                | PGDP       | SW846-6010A | 67.6    | •и               | x                                       | 60         |
| 94010SA010         | 7    | 10               | Chromium            | PGDP       | SW846-6010A | 13.7    |                  | x                                       | 43         |
|                    | 7    | 10               | Lithium             | PGDP       | SW846-6010A | 7.17**  |                  | x                                       | N/A        |
|                    | 7    | 10               | Sodium              | PGDP       | SW846-6010A | 363     |                  | ×                                       | 340        |
|                    | 7    | 10               | Strontium           | PGDP       | SW846-6010A | 12.2    | .N               | x                                       | N/A        |
| 94010SA015         | 12   | 15               | Aluminum            | PGDP       | SW846-6010A | 12700** | .ww              | ×                                       |            |
|                    | 12   | . 15             | Chromium            | PGDP       | SW846-6010A | 8.24    |                  | x                                       | 12000      |
|                    | 12   | 15               | Lithium             | PGDP       | SW846-6010A | 6.68**  |                  | ×                                       | 43         |
|                    | 12   | 15               | Strontlum           | PGDP       | SW846-6010A | 7.46    | ·N               | ×                                       | N/A        |
| 94011SA005         | 2    | 5                | Beryllium           | PGDP       | SW846-6010A | 4.8     |                  | x                                       | N/A        |
|                    | 2    | 5                | Chromium            | PGDP       | SW846-6010A | 15.1    |                  |   | 0.69       |
|                    | 2    | 5                | Lithium             | PGDP       | SW846-6010A | 8.84**  |                  | X                                       | 43         |
|                    | 2    | 5                | Magnesium           | PGDP       | SW846-6010A | 2340    |                  | ×                                       | N/A        |
|                    | 2    | 5                | Sodium              | PGDP       | SW846-6010A | 3333    | .ww              | x                                       | 2100       |
| F8                 | 2    | 5                | Strontium           | PGDP       | SW846-6010A | 369     |                  | x                                       | 340        |
| 94011SA010         | 7    |                  | Chromium            | PGDP       |             | 16.4    | .и               | ×                                       | N/A        |
| 34                 | 7    |                  | Lithium             | PGDP       | SW846-6010A | 11.4    |                  | x                                       | 43         |
|                    | 7    |                  | Sodium              | PGDP ,     | SW846-6010A | 4.78**  |                  | x                                       | N/A        |
| 8 8 8              | 7    | 367              | Strontium           | PGDP ,     | SW846-6010A | 324     | E Paris I        | ×                                       | 340        |
| 94011SA015         | 12   | 537              | Chromium            | PGDP       | SW846-6010A | 9.16    | .11              | x                                       | N/A        |
| SAME OF SAME SAME. | 3556 |                  | STOREMENT .         | FGDF       | SW846-6010A | 21.3    |                  | X                                       | 43         |

<sup>\*\* -</sup> Result exceeds EPA's soil screening values, Recommended Dictary Allowances for children or comparison values do not exist for analyte.

N/A - Background value does not exist

### A-16

### SWMU 194 WAG 28 – ANALYTICAL RESULTS per DOE/OR/07-1846/V1 and V4&D1, January 2000

Table 4.20 Radioactive isotopes detected above BG in soil at AOC 204

|                | Analytical     | Samolo ID    |                | Interval<br>bgs) |                     | Results  | Lab       | Validation | Data       | BG      |
|----------------|----------------|--------------|----------------|------------------|---------------------|----------|-----------|------------|------------|---------|
| Sample Type    | Group          | Sample ID    | Тор            | Bottom           | Analytical Compound | (pcl/g)  | Qualifier | Qualifier  | Assessment | (pci/g) |
| None           |                |              |                |                  |                     |          |           |            |            |         |
| AOC 204 sample | es not contain | ing any dete | ctable radioac | tive Isotop      | es above BG are:    |          |           |            |            |         |
| 04028SA005     | 2040285        | A010         | 204028SA015    |                  | 204028SA020 204     | 028SA025 | 2040      | 28SA030    |            |         |
| 04028SA035     | 2040289        | A040         | 204028SA045    |                  | 204028SA050 2040    | 028SA055 | 2040      | 28SA060    |            |         |
| 04028SD010     | 2040305        | A005C        | 204030SA010    | С                | 204030SA015C 2040   | 30SA020C | 2040      | 30SA025C   |            |         |
| 04030SA030C    | 2040308        | A035C        | 204030SA040    | C                | 204030SA045C 2040   | 30SA050C |           | 30SA055C   |            |         |
| 04030SA060C    | 2040305        | A065C        | 204030SA070    | c ·              | 204030SA075C 2040   | 30SD040C |           |            |            |         |

<sup>\*\* -</sup> Result exceeds EPA's soil screening values, Recommended Dietary Allowances for children or comparison values do not exist for analyte.

N/A - Background value does not exist

Table 4.19 Inorganic compounds detected above BG in soil at SWMU 194

|             |     | e Interval<br>bgs) |                     | !          |               | Results | Lab       | Validation Da | to 1  | BG (mg/kg |
|-------------|-----|--------------------|---------------------|------------|---------------|---------|-----------|---------------|-------|-----------|
| Sample ID   | Тор | Bottom             | Analytical Compound | Laboratory | Method        | (mg/kg) | Qualifier |               | sment | od (mg/kg |
| 194011SA015 | 12  | 15                 | Lithium             | PGDP       | SW846-6010A   | 2.41**  |           | ×             | -     | N/A       |
|             | 12  | 15                 | Strontium           | PGDP       | SW846-6010A   | 3.92    | 'N        | ×             |       | N/A       |
| 94008SA020  | 17  | 20                 | Chromium            | PGDP       | SW846-6010A   | 16.3    |           | x             |       | 43        |
|             | 17  | 20                 | Lithlum             | PGDP       | SW846-6010A   | 2.66**  |           | x             |       | N/A       |
|             | 17  | 20                 | Strontium           | PGDP       | SW846-6010A   | 4.06    | .и        | ×             |       | N/A       |
| 94008SA030  | 27  | 30                 | Chromium            | PGDP       | SW846-6010A   | 20.8    | 66        | ×             |       | 43        |
| 94009SA020  | 17  | 20                 | Chromium            | PGDP       | SW846-6010A   | 26.2    |           | ×             |       | 43        |
|             | 17  | 20                 | Strontlum           | PGDP       | SW846-6010A   | 5.98    |           | x             |       | N/A       |
| 94009SA030  | 27  | 30                 | Chromium            | PGDP       | SW846-6010A   | 7.95    |           | ×             |       | 43        |
| 94010SA020  | 17  | 20                 | Aluminum            | PGDP       | SW846-6010A   | 13900** | .nw       | ×             |       | 12000     |
|             | 17  | 20                 | Beryllium           | PGDP       | SW846-6010A   | 0.89    | 3333      | x             |       | 0.69      |
|             | 17  | 20                 | Chromium            | PGDP       | SW846-6010A   | 26.4    |           | x             |       |           |
|             | 17  | . 20               | Lithlum             | PGDP       | SW846-6010A   | 5.94**  |           | x             |       | 43<br>N/A |
|             | 17  | 20                 | Sodium              | PGDP       | SW846-6010A   | 360     |           | x             |       | 340       |
|             | 17  | 20                 | Strontium           | PGDP       | SW846-6010A   | 7.33    | 'N        | ×             |       |           |
|             | 17  | 20                 | Vanadium            | PGDP       | SW846-6010A   | 45      |           | x             |       | N/A       |
| 94010SA030  | 27  | 30                 | Beryllium           | PGDP       | SW846-6010A   | 1.17    |           | x             |       | 37        |
|             | 27  | 30                 | Chromium            | PGDP       | SW846-6010A   | 53.7**  |           | x             |       | 0.69      |
|             | 27  | 30                 | Lithium             | PGDP       | SW846-6010A   | 2.33**  |           | x             |       | 43        |
|             | 27  | 30                 | Vanadium            | PGDP       | SW846-6010A   | 63      |           |               |       | N/A       |
| 4011SA020   | 17  | 20                 | Chromium            | PGDP       | SW846-6010A   | 23.3    |           | X             |       | 37        |
|             | 17  | 20                 | Strontium           | PGDP       | SW846-6010A   | 2.86    | ***       | ×             |       | 43        |
|             | 17  | 20                 | Vanadium            | PGDP       | SW846-6010A   | 44.B    | .N        | ×             |       | N/A       |
| 4011SA030   | 27  | 30                 | Beryllium           | PGDP       | SW846-6010A   | 1.28    |           | ×             |       | 37        |
|             | 27  | 30                 | Chromium            | PGDP       | SW846-6010A   | 44.1**  |           | X             |       | 0.69      |
|             | 27  | 10000              | Iron                | PGDP       | SW846-6010A   | 31700   | *Allar    | ×             |       | 43        |
|             |     |                    |                     |            | 211010-00 TUA | 31700   | .ww       | ×             |       | 28000     |

<sup>\*\* -</sup> Result exceeds EPA's soil screening values, Recommended Dictary Allowances for children or comparison values do not exist for analyte.

N/A - Background value does not exist

### A-15

### SWMU 194 WAG 28 – ANALYTICAL RESULTS per DOE/OR/07-1846/V1 and V4&D1, January 2000

Table 4.19 Inorganic compounds detected above BG in soil at SWMU 194

| Sample ID   |    | e Interval<br>bgs)<br>Bottom |          | Laboratory | Method      | Results<br>(mg/kg) | Lab<br>Qualifier | Validation Data<br>Qualifier Assessme | BG (mg/kg) |
|-------------|----|------------------------------|----------|------------|-------------|--------------------|------------------|---------------------------------------|------------|
| 194011SA030 | 27 | 30                           | Vanadium | PGDP       | SW846-6010A | 57.4               |                  | ×                                     | 37         |
|             | 27 | 30                           | Zinc     | PGDP       | SW846-6010A | 61.8               | .и               | ×                                     | 60         |

SWMU 194 samples not containing any detectable inorganic compounds above BG are:

(All SWMU 194 samples analyzed for inorganic compounds contained at least one detected analyte.)

<sup>\*\* -</sup> Result exceeds EPA's soil screening values, Recommended Dictary Allowances for children or comparison values do not exist for analyte. N/A - Background value does not exist

SWMU 194 28 Analytical Results

| Analysis           | Method and           | Qualif<br>Hesul |            | V/A*<br>Codes | Analysis             |                 | ab Qualific<br>and Result |           | V/A*<br>Codes | Analysis             | Lab Q<br>Method and  | ualifle<br>Result |            | V/A*<br>Codes |
|--------------------|----------------------|-----------------|------------|---------------|----------------------|-----------------|---------------------------|-----------|---------------|----------------------|----------------------|-------------------|------------|---------------|
|                    | le ID: 194008SA      | 005             |            |               | Samp                 | le ID: 194008   | SA010                     |           |               | Same                 | ole ID: 194008SA     | 015               |            |               |
| Station: 194-008   | MEDIA: SO            |                 | Depth -    | 2 to 5 feet   | Station: 194-008     | MEDIA:          | so                        | Depth =   | 7 to 10 feet  | Station: 194-008     | MEDIA: SO            |                   | Depth - 1  | 2 to 15 fc    |
| METAL              |                      |                 |            |               | METAL                |                 |                           |           |               | METAL                |                      |                   |            |               |
| Munimum            | PGDP-SW846-6010A     | *NW             | 10200mg/kg | x             | Aluminum             | PGDP-SW846-601  | WA AN                     | 8310mg/kg | ¥/            |                      |                      |                   |            |               |
| Antimony           | PGDP-SW846-6010A     | NU              | 20mg/kg    | x/            | Antimony             | PGDP-SW846-601  |                           | 20mg/kg   |               | Afuninum             | PGDP-SW146-6010A     | .NM               | 8710mg/kg  |               |
| Arsenie            | PGDP-SW846-7060      | w               | 6.73mg/kg  | x             | Arsenic              | PGDP-SW846-706  |                           | Smg/kg    |               | Antinxony            | PGOP-SW146-6010A     | NU                | 20mg/kg    |               |
| larium             | PGDP-SW846-6016A     | N               | 123mg/kg   | x/            | Darium               | PGDP-SW846-601  |                           | 93.8mg/kg |               | Arsenie              | PGDP-SW146-7060      | UW                | 5 mg/k g   |               |
| leryllium          | PGDP-SW846-6010A     |                 | 0.83mg/kg  | X/            | Beryllian            | PGDP-SW846-601  |                           | 0.54mg/kg |               | Barium               | PGDP-SW146-6010A     | и                 | 38.3mg/kg  |               |
| loros              | PGDP-SW846-6010A     | NU              | 100mg/kg   | x/            | Boron                | PGDP-SW846-601  |                           | 100mg/kg  |               | Berytlium            | FGDF-SW146-6010A     | 3622              | 0.56mg/kg  |               |
| admium             | PGDP-SW846-6010A     | U               | 2mg/kg     | x             | Cadmium              | PGDP-SW846-601  |                           | 2mg/kg    |               | Octon .              | PGDP-SW146-6010A     | NU                | 100 mg/kg  |               |
| alcium             | PGDP-SW846-6610A     | NW              | 6810mg/kg  | X/            | Calcium              | PGDP-SW846-601  | OA NW                     | 1930mg/kg |               | Cadmium              | PGDP-SW846-6010A     | U                 | 2mg/kg     |               |
| 'hromium           | PGDP-SW846-6010A     |                 | 13.4mg/kg  | x             | Chromium             | PGDP-SW846-601  |                           | 14.4mg/kg |               |                      | PGDP-SW146-6010A     | MW                | 1003mg/kg  |               |
| obalt              | PGDP-SW846-6010A     |                 | 9.3mg/kg   | XI .          | Cobalt               | PGDP-SW846-601  |                           |           |               | Chromium             | PGDP-SW846-6010A     |                   | 11.7mg/kg  | X/            |
| opper              | PGDP-SW846-6010A     |                 | 13.2mg/kg  | X/            | Copper               | PGDP-SW846-601  |                           | 2.98mg/kg |               | Cobali               | PGDP-SW846-6010A     |                   | 6.75mg/kg  | X/            |
| on .               | PGDP-SW846-6010A     | *NW             | 17900mg/kg |               | tron                 | PGDP-SW146-601  |                           | 7.67mg/kg |               | Copper               | PGDP-SWE46-6010A     |                   | 2.53 mg/kg |               |
| cad                | PGDP-SW846-6010A     | U               | 20mg/kg    | x/            | Lead                 | PGDP-SW846-601  | National Control          | 9740mg/kg |               | Iron                 | PGDP-SW846-6010A     | .MM               | 15600mg/kg | X/            |
| ithium             | PGDP-SW846-6010A     |                 | 8. tmg/kg  |               | Lithium              | PGDP-SW846-6016 |                           | 20mg/kg   |               | l.ead                | PGDP-SW846-6010A     | U                 | 20mg/kg    | X/            |
| tagnesium          | PGDP-SW846-6010A     | *NW             | 1700mg/kg  | 2000          | Magnesium            | PGDP-SW146-6016 |                           | 6.86mg/kg |               | Lithium              | PGDP-SW846-6010A     |                   | 4.69mg/kg  | X/            |
| langanese          | PGDP-SW846-6010A     |                 | 467mg/kg   | 23 ·          | Manganese            | PGDP-SW846-6010 |                           | 1330mg/kg |               | Magnesium            | PGDP-SW846-6010A     | .MM.              | 722mg/kg   | X/            |
| lercury            | PGDP-SW846-7471      | U               | 0.2mg/kg   | 22            | Mercury              | PGDP-SW846-747  |                           | 127mg/kg  |               | Manganese            | PGDP-SW846-6010A     |                   | 127mg/kg   | X/            |
| ickel              | PGDP-SW146-6010A     |                 | 12mg/kg    |               | Nickel               | PGDP-SW846-6010 | 3 T                       | 0.2mg/kg  |               | Mercury              | PGDP-SW846-7471      | U                 | 0.2mg/kg   | X/            |
| otassium           | PGDP-SW846-6010A     | N               | 538 mg/kg  |               | Potassions           | PGDP-SW846-6010 | 74 m                      | 7.58mg/kg |               | Nickel               | PGDP-SW846-6010A     |                   | 7.5mg/kg   | x             |
| rlenium            | PGDP-SW846-7740      | UW              | Img/kg     | ***           | Selenium .           |                 | 300 Mar                   | 367mg/kg  |               | Potassium            | PGDP-SW846-6010A     | N                 | 246mg/kg   | x             |
| lver               | PGDP-SW846-6010A     | U               | 4ng/kg     |               | Silver               | PGDP-SW846-7740 |                           | Img/kg    |               | Selenium             | PGDP-SW846-7740      | UW                | Img/kg     | X/            |
| dium               | PGDP-SW846-6010A     | U               | 200mg/kg   |               | Sodium               | PGDP-5W846-6010 |                           | 4mg/kg    |               | Silver               | PGDP-SW846-6010A     | U                 | 4mg/kg     | X/            |
| Pontium            | PGDP-SW846-6010A     | *N              | 26mg/kg    |               | Strontium            | PGDP-SW846-6010 |                           | 210nw/kg  |               | Sodium               | PGDP-SW\$46-6010A    |                   | 260mg/kg   | X/            |
| nallium            | PGDP-SW846-6010A     | NU              | 15mg/kg    |               |                      | PGDP-SW846-6010 |                           | 15.9mg/kg | X/            | Strontium            | PGDP-SW846-6010A     | *N                | 7.12mg/kg  | XU            |
| anadium            | PGDP-SW846-6010A     |                 | 22.6mg/kg  |               | Thallium             | PGDP-SW146-6010 |                           | 15mg/kg   | x,            | Thallium             | PGDP-SW846-6010A     | NU                | 15mg/kg    | X/            |
| nc                 | PGDP-SW846-6010A     | •N              | 62.6mg/kg  |               | Vanadium<br>Ziva     | FGDP-SW846-6010 |                           | 19.8mg/kg | X/            | Variadium            | PGDP-SW846-6010A     |                   | 16.2mg/kg  | x             |
| ETCHEM             |                      | 1000            |            |               | Zinc                 | PODP-5W146-6010 | 0A *H                     | 43.3mg/kg | x/            | Zinc                 | PGDP-SW846-6010A     | .M                | 15.7mg/kg  | X/            |
| romium, hexavalent | PGDP-SM-3300-Cr D 13 | r mi            |            |               | WETCHEM              |                 |                           |           |               | WETCHEM              |                      |                   |            |               |
| ranide             | PGDP-SW846-9014      | U               | 0.5mg/kg   |               | Chromium, hexavalent | PGDP-SM-3500-Cr | D 17 JU                   | 0.5mg/kg  | X/            | Chromium, hexavalent | PGDP-SM-3500-Cr D 17 | ) JU              | 0.5mg/kg   | X/            |
| Ç*                 | - 201. 2 HB40-3014   | J               | ling/kg    | */            | Cyanide              | PGDP-SW846-9014 | U                         | Img/kg    | X/            | Cyanide              | PGDP-SW846-9014      | U                 | Img/kg     |               |

SWMU 194 - W/ :8 Analytical Results

| Analysis .       |                      | Quali<br>d Resi |             | V/A*          | Analysis             |                 | ab Qualifi<br>and Result | er         | V/A*<br>Codes | Analysis             | Lab                  | valifie |             | V/A*      |
|------------------|----------------------|-----------------|-------------|---------------|----------------------|-----------------|--------------------------|------------|---------------|----------------------|----------------------|---------|-------------|-----------|
| Samp             | ole ID: 194008SA     | 020             |             |               | Came                 |                 |                          |            | Codes         |                      | micinou and          | Result  | Units       | Codes     |
| ation: 194-008   | MEDIA: SO            | 10707           | Death -     | 17 to 20 feet | Station: 194-008     | ole ID: 194008  |                          |            |               | Samp                 | ole ID: 194009SA     | 005     |             |           |
|                  |                      |                 | Defin -     | 7 10 20 1001  | Station: 194-008     | MEDIA           | so                       | Depth = 2  | 7 to 30 feet  | Station: 194-009     | MEDIA: SO            |         | Depth -     | 2 to 5 fc |
| ETAL.            |                      |                 |             |               | METAL                |                 |                          |            |               |                      | is a                 |         |             |           |
| unitimum;        | PGDP-SW846-6010A     | *NW             | 6530mg/kg   |               | METAL                |                 |                          |            |               | METAL                |                      |         |             |           |
| timony           | PGDP-5W846-6010A     | NU              | 20mg/k      |               |                      | PGDP-SW146-60   | 331 - AM.                | 2210mg/kg  | x             | Aluminum             | PGDP-SW846-6010A     | *NW     | 10100mg/kg  | X/        |
| enie             | PGDP-SWE46-7060      | UW              | Smy/kg      | 1             | Antimony             | PGDP-5W846-60   |                          | 20mg/kg    | X/            | Antimony             | PGDP-SWE46-6010A     | HU      | 20ng/kg     | X/        |
| rium             | PGDP-5W846-6010A     | N               | 19.9mg/kg   | 8             | Arsenic              | PGDP-SW846-700  |                          | 6.97mg/kg  | X/            | Arsenic              | PGDP-SW146-7060      | UW      | Sng/kg      | x/        |
| yllium           | PGDP-SW846-6010A     |                 | 337 5       |               | Darium               | FGDP-SW846-601  | 303                      | 7.72mg/kg  | X/            | Darium               | PGDP-SW846-6010A     | N       | 139my/kg    | X/        |
| ron              | PGDP-5W846-6010A     | NU              | 0.53mg/kg   |               | Deryllium            | PGDP-SW846-601  |                          | 0.55mg/kg  | x             | Deryllium            | PGDP-5W846-0010A     |         | 0.73mg/kg   | x/        |
| Janium           | PGDP-SW846-6010A     | U               | 100mg/kg    |               | Boron                | PGDP-SW846-601  | DA NU                    | 100mg/kg   | X/            | Boron                | PGDP-SW846-6010A     | NU      | 100mg/kg    |           |
| kium             | PGDP-SW846-6010A     | NW              | 2mg/kg      |               | Cadmium              | PGDP-SW846-601  | 0A U                     | 2mg/kg     | X/            | Cadmium              | PGDP-SW846-6010A     | U       | 2mg/kg      |           |
| Ontiana          | PGDP-SW846-6010A     |                 | 751mg/kg    | 3 9           | Calcium              | PGDP-SW146-601  | OA                       | 248 mg/kg  | X/            | Calcium              | PGDP-SW846-6010A     | NW      | 2550mg/kg   |           |
| ult              | PGDP-5W#46-6010A     |                 | 16.3mg/kg   |               | Chronium             | PGDP-SW146-601  | OA.                      | 20.8 mg/kg | X/            | Chronium             | PGDP-SWE46-6010A     |         | 15.4mg/kg   |           |
| per              | PGDP-SW#46-6010A     |                 | 2.53mg/kg   |               | Cohalt               | PGDP-SW846-601  | OA.                      | 1.89mg/kg  | X/            | Cobalt               | PGDP-SW846-6010A     |         | 7.56 mg/kg  |           |
|                  | PGDP-SW#46-6010A     |                 | 2.46mg/kg   | 3             | Copper               | PGDP-SW846-601  | M U                      | 2mg/kg     | X/            | Copper               | PGDP-SW146-6010A     |         | 11.1mg/kg   |           |
| d                | PGDP-5W846-6010A     | .ww             | 12700 mg/kg | 3             | tros                 | PGDP-5W846-601  | WH. YO                   | 9610mg/kg  | X/            | tron                 | PGDP-SWI46-6GIOA     | *NW     | 15700 mg/kg |           |
| ium              | PGDP-SWEI6-6010A     | U               | 20mg/kg     |               | lead                 | PGDP-SW146-601  | DA U                     | 20mg/kg    | X/            | Lead                 | PGDP-SW846-6010A     | U       | 20 mg/kg    |           |
| guesium          |                      |                 | 2.66 mg/kg  | 3             | Lithium              | PGDP-SW#46-601  | MA U                     | 2mg/kg     | X/            | Lithium              | PGDP-SW846-6010A     | ®       | 8.75 mg/kg  |           |
| iganese          | PGDP-SWE46-6010A     | *NW             | 482mg/kg    |               | Magnesium            | PGDP-5W846-601  | DA.                      | f 10 mg/kg | x/            | Magnesium            | PGDP-SWE46-6010A     | *NW     |             |           |
|                  | PGDP-SW846-6010A     |                 | 41.3mg/kg   | X/            | Manganese            | PGDP-SWE46-601  | • •                      | 17.2mg/kg  | x/            | Manganese            | PGDP-SW146-6010A     |         | 1670mg/kg   |           |
| eury             | PGDP-SWE46-7471      | U               | 0.2mg/kg    | x/            | Mercury              | PGDP-SW846-747  | U                        | 0.2mg/kg   | x/            | Mercury              | PGDP-SW146-7471      | u       | 254mg/kg    |           |
|                  | PGDP-5W#16-6010A     | U               | Smg/kg      | X/            | Nickel               | PGDP-SW246-6016 | DA U                     | Smg/kg     | x/            | Nickel               | PGDF-SW146-6010A     | ŭ       | 0.2mg/kg    |           |
| sşium<br>mium    | PGDP-5W846-6010A     | н               | 136mg/kg    | xu            | Potassium            | PGDP-5W846-601  | PA U                     | 100mg/kg   | X/            | Potagsiana           | PGINF SWEEF SOIDA    | N       | 13.7mg/kg   |           |
| 4                | PCHIP-SW846-7740     | IIW             | Img/kg      | 1333          | Selenium             | PGIN-SWE44-174  | UW                       | Img/kg     | x/            | Sclenium             | PG//P-SWE46-7740     | UW      | 577mg/Lg    |           |
| um.              | PCHIP SWEEL HOLEA    | U               | 4mg/kg      | ×/            | Silver               | PODE-5WE46-6011 | M U                      | 4mg/kg     | x/            | Silver               | PGUP-SW846-6016A     | U       | Ing/kg      |           |
| etium            |                      | U               | 200mg/kg    | x/            | Sodium               | PGDP-SW146-6010 | M U                      | 200mg/kg   | x             | Sodium               | PGOP-SW840-0010A     | U       | 4mg/kg      |           |
|                  | PGDP-SW846-6010A     | •н              | 4.06mg/kg   | ×/            | Strontium            | PGDP-SW#40-6010 | u A                      | 2ng/kg     | X/            | Strontium            | PGDP-SW846-6010A     | •м      | 200 mg/kg   |           |
| isana<br>        |                      | MU              | 15mg/kg     | x/            | Diallium             | PGDP-SW846-6010 | M U                      | 15mg/kg    |               | Thallions            | PGDP-SW846-6010A     | NU      | 17mg/kg     |           |
| dium             | PGDP-SW846-6010A     |                 | 23.7mg/kg   | ×             | Vanadium             | PGDP-SW#40-0010 | M                        | 27.5mg/kg  | Silver .      | Vanadium             |                      | NU      | 15mg/kg     |           |
|                  | PGDP-SW846-6010A     | •н              | 16.3mg/kg   | x             | Zinc                 | PGDP-SW440-4010 | M U                      | 15mg/kg    |               | Zinc                 | PGDP-SW846-6010A     |         | 25.8mg/kg   |           |
| TCHEM            |                      |                 |             | į             | WETCHEM              |                 |                          |            | 100           |                      | PGDP-SW846-6010A     | *N      | 47.6mg/kg   | X/        |
| nium, kexavalent | PGDP-SM-3500-Cr D 17 | JU              | 0.5mg/kg    | xu (          | Chrominn, hexavalent | PGDP-SM-1500-Cr | 0 17 10                  | 0.5        | 2.            | WETCHEM              |                      |         |             |           |
| ide ,            | PGDP-SW#46-9014      | U               | Img/kg      |               | Cyanide              | PGDP-SW846-9014 |                          | O.Sing/Lg  |               | Chromium, hexavalent | PGDP-SM-1100-Cr D 17 | U       | 0.5mg/kg    | X/        |
|                  |                      |                 | 100000      | r             |                      |                 | U                        | Img/kg     | X/            | Cyanide              | PGDP-SW846-9014      | U       | Img/Lg      | X/        |

SWMU 194

28 Analytical Results

| Analysis           |                       | Qualiffi<br>Result |            | V/A*<br>Codes | Analysis             |   | ab Qualific<br>and Result | r<br>Units | V/A*<br>Codes | Analysis             | Lab Q                         | ualific<br>Result |            | V/A*        |
|--------------------|-----------------------|--------------------|------------|---------------|----------------------|---|---------------------------|------------|---------------|----------------------|-------------------------------|-------------------|------------|-------------|
| Samp               | ole ID: 194009SA      | 010                |            |               | Same                 | ole ID: 194009  | SA015                     |            |               | C                    |                               |                   |            |             |
| Station: 194-009   | MEDIA: SO             |                    | Depth = 7  | to 10 feet    | Station: 194-009     | MEDIA:  |                           | Douth = 1  | to 15 feet    | Station: 194-009     | ole ID: 194009SA<br>MEDIA: SO | 020               |            |             |
|                    |                       |                    |            |               |                      |   |                           | Depin - 1  | 10 13 100     | 174-009              | MEDIA: 50                     |                   | Depth = 1  | 7 to 20 fee |
| HETAL              |                       |                    |            |               | METAL                |   |                           |            |               | METAL                |                               |                   |            |             |
| luminum            | PGDP-SW446-6010A      | .MM                | 9130mg/kg  | X/            | Alaminum             | PGDP-SW140-60   | IDA NW                    | 4680mg/kg  | x/            | Ahaninan             | PGDP-SW846-6010A              | NW                | ****       |             |
| ntimony            | PGDP-SW848-6010A      | NU                 | 20mg/kg    | x             | Antimony             | PGDP-5W840-60   | 10A 'NU                   | 20mg/kg    |               | Antimony             | PGDP-5W846-6010A              | *NU               | 446Gmg/kg  |             |
| rsenic             | PGDP-SW141-7060       | UW                 | Smg/kg     | X/            | Arsenic              | PGDP-SW846-70   | 00 UW                     | Smg/kg     |               | Arsenic              | PGDP-SW146-7060               | UW                | 20mg/kg    |             |
| ariant             | PGDP-SW#46-6010A      | N                  | Hany/kg    | X/            | Barium .             | PODP-SW846-60   | IGA                       | 24.2mg/kg  |               | Dariun               | PGDP-SW\$46-6010A             |                   | Smg/kg     |             |
| eryllium           | PGDP-SW146-6010A      | U                  | 0.5mg/kg   | ×             | Beryllium            | PGDP-5W846-60   | IFA U                     | 0.5mg/kg   |               | Beryllium            | PGDP-5W846-6010A              | U                 | 18.2mg/kg  |             |
| oreit              | PGDP-SW146-6010A      | NU                 | 100mg/kg   | ×             | Doron                | PGDP-SW#46-60   | IOA NU                    | 100mg/kg   |               | Boros                | PGDP-SW846-6010A              | NU                | 0.5mg/kg   |             |
| admium             | PGDP-SW146-6010A      | U                  | 2mg/kg     | ×             | Cadmium              | PGDP-SW846-60   | IOA U                     | 2mg/kg     |               | Cadnium              | PGDP-SW146-6010A              | U                 | 100mg/kg   |             |
| alcium .           | PGDP-SW146-6010A      | HW                 | 1510ng/kg  | X/            | Calcium              | PGDP-SW846-60   | 10A                       | 690nw/kg   |               | Calcium              | PGDP-SW846-6010A              |                   | 2mg/kg     |             |
| hromium            | PGDP-SW846-6010A      |                    | 13.5mg/kg  | X/            | Chromian             | PGDP-SW146-60   | IOA                       | 8.25mg/kg  |               | Chronium             | PGDP-SWE46-6010A              |                   | 771 mg/kg  |             |
| balt               | PGDP-SW846-6010A      |                    | 2.52mg/kg  | x/            | Cobalt               | PGDP-SW146-60   | IOA ADI                   | 2.75mg/kg  |               | Cobalt               | PGDP-SW846-6010A              |                   | 26.2mg/kg  |             |
| pper               | FGDP-5W846-6010A      |                    | £mg/kg     | X/            | Cupper               | PGDP-SW846-60   | IOA                       | 3.12mg/kg  |               | Copper               | PGDP-SWE46-6010A              |                   | 1.45mg/kg  |             |
| •                  | FGDP-SW846-6010A      | .MM                | 6940mg/kg  | x/            | tron                 | PGDP-SW846-60   | WH. YO                    | 1600mg/kg  |               | Iron                 | PGDP-SWE46-6010A              | *NW               | 2.72 mg/kg |             |
| ad                 | PGDP-SW846-6010A      | U                  | 20mg/kg    | x/            | Lead                 | PGDF-SW846-601  |                           | 20mg/kg    |               | Lead                 | PGDP-SWI46-60IBA              | U                 | 6880mg/kg  |             |
| hium               | PGDP-SW846-6010A      |                    | 6.17mg/kg  | w .           | Lithium              | PGDP-SW846-601  | IOA.                      | 2.11mg/kg  |               | Lithium              | PGDP-5W846-6010A              | U                 | 20mg/Lg    |             |
| gnesium            | PGDP-5W846-6010A      | 'NW                | 1240mg/kg  | XV            | Magnesium            | PGDP-SW846-601  | IOA                       | 459mg/kg   |               | Magnesium            | PGDP-5W146-6010A              |                   | Susple R   |             |
| anganese           | PGDP-SW846-6010A      |                    | 57.1 mg/kg | x/            | Manganese            | PGDP-SW846-601  | 10A •                     | 40.7mg/kg  |               | Manganese            | PGDP-5W146-6010A              |                   | 393mg/kg   |             |
| ercury             | PGDP-SW846-7471       | U                  | 0.2mg/kg   | x/            | Mercury              | PGDP-SW846-747  | 11 U                      | 0.2mg/kg   |               | Mercury              | PGDP-SW846-7471               | U                 | 19.4mg/kg  |             |
| ckel               | PGDP-SWE46-6010A      |                    | 5.74mg/kg  | x/            | Nickel               | PGDP-5W846-601  | OA U                      | Smg/kg     |               | Nickel               | PGDP-SWB46-6010A              |                   | 0.2 mg/kg  |             |
| lassium            | PGDP-SW846-6010A      | N                  | 322mg/kg   | X/            | Potassium            | FGDF-SW846-601  | OA.                       | 180mg/kg   |               | Potarsium            | PGDP-5W846-6010A              | u                 | Smg/kg     |             |
| leniuna            | PGDP-SW846-7740       | UW                 | Img/kg     | x/            | Sclenium             | PGDP-SW846-774  | o uw                      | Img/kg     |               | Selenium             | PGDP-SW846-7740               |                   | 158 mg/kg  |             |
| ver                | PGDP-SW840-6010A      | U                  | 4mg/kg     | xu u          | Silver               | PGDP-SW846-601  | OA U                      | 4mg/kg     |               | Silver               |                               | UW                | I mg/kg    |             |
| diwn               | PGDP-SWEI6-6010A      | U                  | 200mg/kg   | x/            | Sodium               | PGDP-SW146-601  |                           | 211mg/kg   |               | Sodium               | PGDP-SW846-6010A              | U                 | 4mg/kg     |             |
| Ontium             | PGDP-5W846-6010A      | ·N                 | 13.4mg/kg  | xu            | Strontium            | PGDP-SW816-601  | 0A                        | 4.4mg/kg   |               | Strontium            | PGDP-SW846-6010A              |                   | 216mg/kg   |             |
| Hium               | PGDP-SW846-6010A      | NU                 | 15mg/kg    | x/            | Thallium             | PGDP-SW844-601  |                           | 15mg/kg    |               | Thallium             | PGDP-SW846-6010A              |                   | 5.98 mg/kg |             |
| nadium             | PGDP-SWE46-6010A      |                    | 19.Jang/kg | x/            | Vanadium             | PGDP-5WE46-601  | 0A                        | 18.6mg/kg  |               | Vanadium             | PGDP-SW846-6010A              | U                 | 15 mg/kg   |             |
| c                  | PGDP-SW846-6010A      | *N                 | 22.3mg/kg  | w i           | Zinc                 | PGDP-SW146-601  | UA.                       | 16.1mg/kg  |               | (B)(B)(B)(B)(C)      | PGDP-SWE46-6010A              |                   | 18.6mg/kg  |             |
| ETCHEM             |                       |                    |            |               | WETCHEM              | AND AND THE PARTY OF THE PARTY |                           | .o. mg/kg  | -             | Zine                 | PGDF-5W846-6010A              |                   | 18.5mg/kg  | XJ          |
| romium, hexavalent | PGDP-\$M-3500-Cr D 17 | N                  | 0.5mg/kg   | 222           | Chromium, bezavalent | PGDP-SM-3500-C  | D 17 JU                   | O Suman    | */            | WETCHEM              | LOUIS DO TOTAL                | 200               |            |             |
| anide              | PGDP-SWI46-9014       | U                  | Img/kg     | 322 8         | Cyanide              | PGDP-SW846-901  |                           | 0.5mg/kg   | H.            | Chromium, hexavalent | PGDP-\$M-3500-Cr D (          |                   | 0.5ng/kg   | X)          |
| 6                  |                       |                    |            |               |                      |   |                           | Img/kg     | ~             | Cyanide              | PGDP-SW846-9014               | U                 | Img/kg     | X/          |

| 3 W W U 194      | 28 Analytica         | al Resu               | lts             | •             |  | ( )                           |                    |            |              |                     |                   |          |             |          |
|------------------|----------------------|-----------------------|-----------------|---------------|--|-------------------------------|--------------------|------------|--------------|---------------------|-------------------|----------|-------------|----------|
| Analysis         |                      | b Qualifi<br>nd Resul |                 | V/A*          | Analysis   | ** ** *                       | unliffic<br>Result | (2)        | V/A*         | 1                   | La                | Qualif   | <br>ler     | V/A*     |
| San              | ple ID: 194009S      | A030                  |                 |               | C4   |                               |                    |            | Codes        | Analysis            | Method a          | nd Resul | t Units     | Codes    |
| tation: 194-009  | MEDIA: SC            |                       | Depth -         | 17 to 30 feet | Station: 194-009   | le ID: 194009SD0<br>MEDIA: SO |                    | Depth - t  | 2 to 15 feet |                     | le ID: 194010S    |          |             |          |
| ETAL             |                      |                       |                 |               | 2.5200   |                               |                    |            |              | 134-010             | MEDIA: S          | O.       | Depth -     | 2 to 5 f |
| luminum          | PGDP-SWEE GOIGA      | NW                    | ****            |               | METAL  |                               |                    |            |              | METAL               |                   |          |             |          |
| tiniony          | PGDP-5W846-6010A     |                       | 3370mg/kg       |               | Aluminum   | PGDP-SW846-6010A              | HW                 | 6430 mg/kg | X/           | Aluminum            | PGDP-SW846-6010   | A *NW    |             | 0.000    |
| senic            | PGDP-SW#46-7060      | UW                    | 20mg/kg         |               | Antimony   | PGDP-5W846-6010A              | *NU                | 20mg/kg    |              | Antinony            | PGDP-SW146-6010   |          |             |          |
| rium             | PGDP-SW144-6016A     |                       | 5mg/kg          |               | Arsenic  | FGDP-SW846-7060               | UW                 | 5mg/kg     | 'xı          | Arsenie             | PGDP-SW846-7060   |          | 20mg/kg     |          |
| ryllium          | PGDP-SW846-0010A     |                       | 11.2mg/kg       |               | Barium   | PGDP-SWE46-0010A              |                    | 27.5mg/kg  | X/           | Barium              | PGDP-5W846-6010   |          | 5mg/kg      |          |
| HELINI<br>HELINI | PGDP-SWIM-60IDA      |                       | 0.5mg/kg        | The same      | Deryllium  | PGDP-SW146-6010A              | U                  | 0.5mg/kg   | X/           | Beryllium           |                   |          | 125 mg/kg   |          |
| durium           | PGDP-SWE46-6010A     |                       | 100mg/kg        | 9             | Boron  | PGDP-SW146-6010A              | NU                 | 100mg/kg   | w            | Boros               | PGDP-SW846-6010   |          | 0.83mg/kg   |          |
| lcium            | PGDP-SW846-6010A     | U                     | 7mg/kg          | V             | Cadmium  | PGDP-SWE46-6010A              | U                  | Zmg/kg     | X/           | Cadmium             | PGDP-SW846-6010   |          | 100mg/kg    | X/       |
| romium           | PGDP-SW846-6010A     |                       | 315mg/kg        | J. 83         | Calcium  | PGDP-SW846-6010A              |                    | 796mg/kg   |              | Calcium             | PGDP-SWE44-6016   |          | . 2mg/kg    | X/       |
| balt             |                      |                       | 7.95 mg/kg      | X/            | Chromium   | PGDP-SW846-6010A              |                    | 11.5mg/kg  |              | Chronium            | PGDP-SW846-6010   |          | 777mg/kg    | X/       |
| oper             | PGDP-SW846-6010A     |                       | 1.15mg/kg       | X/            | Cobalt   | PGDP-SW846-6010A              |                    | 2.68mg/kg  |              |                     | PGDP-SW846-6010   |          | 17.4mg/kg   | X/       |
| 1                | PGDP-SWE46-6010A     | U                     | 2mg/kg          | w             | Copper   | PGDP-SWI46-6010A              |                    | 3.62mg/kg  |              | Cobalt              | PGDP-SW146-6010   |          | 9.46mg/kg   | X/       |
|                  | PGOP-SW845-6010A     | *NW                   | \$490mg/kg      | x/            | Iron   |                               | 'NW                |            |              | Copper              | PGDP-SW146-6010/  |          | 16.7mg/kg   | X/       |
| 4                | PGDP-5WE46-6010A     | U                     | 20mg/kg         | X/            | Lead   |                               | U                  | 9380mg/kg  |              | Iron                | PGDP-SW146-6010/  | .ww      | 20000 mg/kg | W        |
| vium             | PGDP-5W146-6010A     | U                     | 2mg/kg          | w .           | Lithium  | PGDP-SW846-6019A              |                    | 20mg/kg    |              | Lead                | PGDP-5W146-6010/  | U        | 20mg/kg     | X/       |
| gricsiuna        | PGDP-5W848-6010A     |                       | 143mg/kg        | x/            | Magnesium .  | PGDP-SW846-0010A              |                    | 3.23mg/kg  |              | Lithium             | PGDP-SW146-6010   |          | 9mg/kg      | x/       |
| nganese          | PGDP-5W846-6010A     |                       | 14.8mg/kg       |               | Manganese  |                               |                    | SS6mg/kg   |              | Magnesium           | PGDP-SW146-6010A  | "NW      | 2330 mg/kg  |          |
| icury            | PGDP-SW146-7471      | U                     | 0.2mg/kg        |               | Mercury  | PGDP-SWE46-6010A              |                    | 35.7mg/kg  | w            | Manganese           | PGDP-5W146-6010A  | 7940.00  | 326 mg/kg   |          |
| kel              | PGDP-SW846-6010A     | U                     | Smg/kg          |               | Nickel   |                               | U                  | 0.2mg/kg   | X/           | Mercury             | PGDP-SW146-7471   | U        | 0.2mg/kg    |          |
| ssium            | PGDP-SW#46-6010A     |                       | 101mg/kg        | [             | *Ofassium  | PGDP-SW846-6010A              | U                  | Smy/kg     | X/           | Nickel              | PGDP-SWI46-6010A  |          | 11.9mg/kg   |          |
| néws             | PGDP-SW846-7749      | UW                    | Img/kg          | [             |  | PGDP-SW846-6010A              |                    | 228mg/kg   | X/           | Potassium           | PGDP-SW846-6010A  |          |             |          |
|                  | PGDP-SW\$46-6010A    | U                     | 4mg/kg          |               | iclenium<br>-  | 57.00                         | UW                 | ing/kg     | X/           | Selenium            | PGDP-SW846-7740   | vw       | 616mg/kg    |          |
| ugn              | PGDP-SW246-6010A     | U                     | 200mg/kg        |               | illver   | PGDP-SW846-6010A (            | U                  | 4mg/kg     | xu i         | Silver              | PGDP-5W146-6010A  |          | Img/Lg      |          |
| edfurn           | PGDP-SW846-6010A     | U                     |                 | [             | iodius   | A0109-998WZ-40D4              |                    | 242 mg/kg  | x/           | Sodium              | PGDP-SW846-6010A  |          | 4mg/kg      |          |
| lijans           | PGDP-SW846-6016A     | U                     | 2mg/kg          | [             | troutium   | PGDP-SWEIG-GOIGA              |                    | .44mg/kg   |              | Structions          | PGDP-SW848-6010A  |          | 364 mg/kg   |          |
| dium             | PGDP-SW846-6010A     | U                     | 15mg/kg         | . 1           | hallium  | PGDP-SW146-4010A U            |                    | 15mg/kg    | 1            | Diallium            |                   |          | l 6.8mg/kg  | X/       |
|                  |                      |                       | tour/kg         | 1             | 'anadium   | PGDP-SW846-6010A              | - 1                | 4.1mg/kg   | !            | Vanadium            | PGDP-SW846-6010A  | NU       | 15mg/kg     | X/       |
| TCHEM            | PGDP-SW846-6010A     | U                     | 15mg/kg         | xu  z         | ine  | PGDP-SW846-6010A              |                    | 4.lmg/kg   | . !          | Yes                 | PGDP-SW846-6010A  |          | 23.9 mg/kg  | X/       |
|                  |                      |                       |                 | ľ             | VETCHEM -  |                               | 10.                |            |              | Zine                | PGDP-SWE46-6010A  | .11      | 67.6mg/kg   | X/       |
| munt, hexavalent | PGDP-SM-3500-Ci D 17 | טו י                  | 0.5mg/kg        | w  c          | luonium, hexavalent  | PGDP-SM-3500-Cr D 17 JU       |                    |            |              | WETCHEM             |                   |          |             |          |
| ide              | PGDP-SW848-9014      | U                     | tung/kg         |               | yanide   |                               | 9                  | 0.5mg/kg ) | : T          | Inomium, bexavalent | PGDP-SM-3300-Cr D | 17 10    | 0.5mg/kg 3  | X/       |
| 1.0              |                      |                       | C. 1004-540-548 | - 17          | * CONTRACTOR OF THE PROPERTY O | PODP-5W846-9014 U             | 5                  | Img/kg )   | e k          | yanide              | PGDP-SW846-9014   | U        | Imp/kg >    |          |

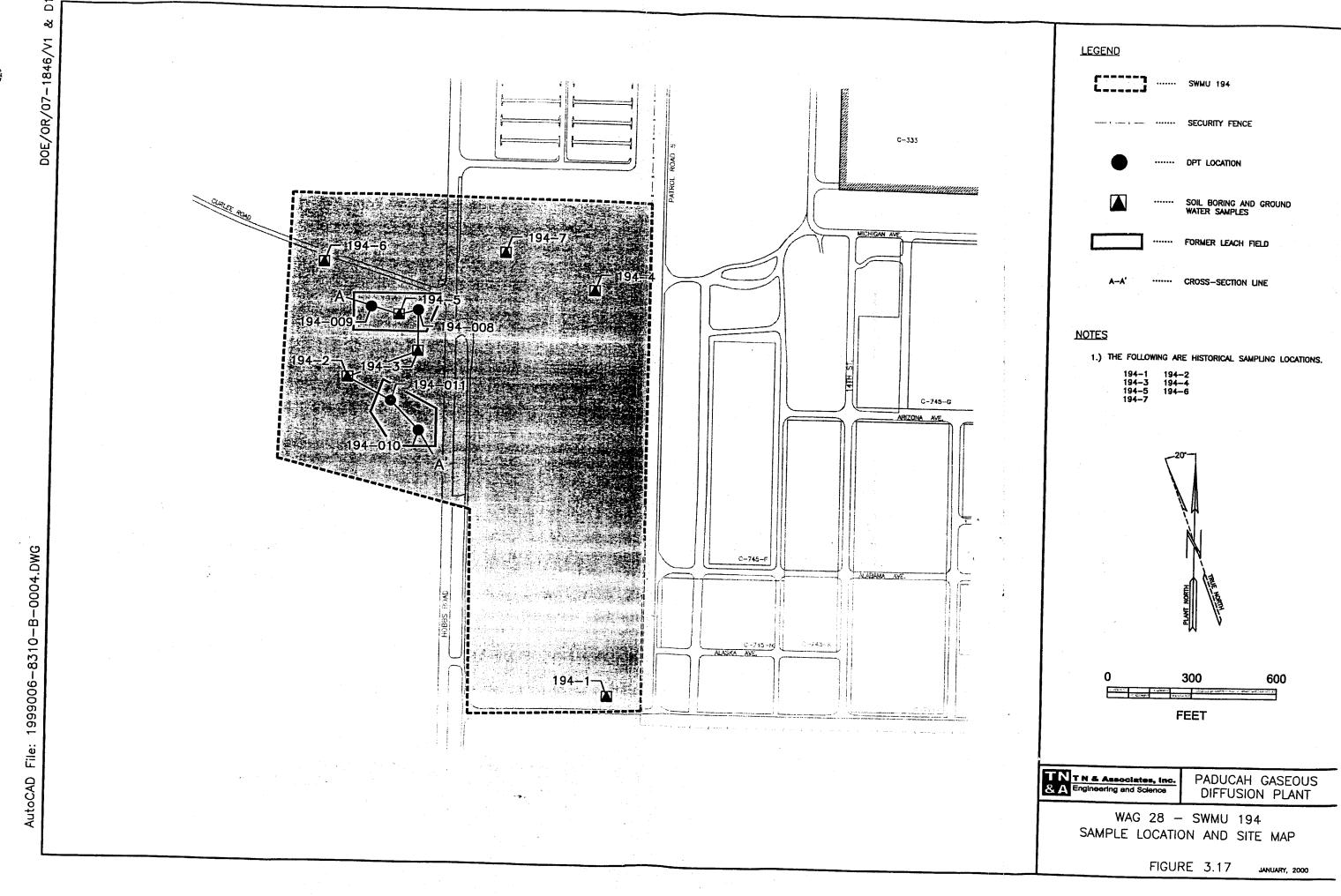
.( 48 Analytical Results SWAIU 194 Lab Qualiffer V/A. Lab Qualifier Analysis Method V/A\* and Result Lab Qualifier Units Codes Analysis V/A\* Method and Result Units Codes Analysis Method and Result Units Codes Sample ID: 194010SA010 Sample ID: 194010SA015 Station: 194-010 Sample ID: 194010SA020 MEDIA: SO Depth - 7 to 10 feet Station: 194-010 MEDIA: SO Depth = 12 to 15 feet Station: 194-010 MEDIA: SO Depth = 17 to 20 feet METAL METAL METAL Aluminum PGDP-SW146-6010A \*NW 8800mg/kg X/ Aluminum PGDP-SWE46-6010A \*NW 12700 mg/kg X/ Antimony Aluminum PGDP-SW846-6010A PGDP-5W846-6010A \*NW 13900mg/kg X/ NU 20mg/kg X/ Antimony PGDP-SW846-6010A 20mg/kg X/ Arsenic Antimony PGDP-SWE16-7060 PGDP-SW846-601GA UW 20 nig/kg XI Smy/kg X/ Arsenie PGDP-SW846-7060 Smurke XI Barium Arsenic PGDP-SW846-7000 PGDP-SW846-6010A 87.8mg/kg X/ Snu/kg X/ Barium PODP-SW346-6010A 37.2 nw/kg X/ Beryllium Barium PGDP-SW846-6010A PGDP-SW846-6010A 37.1mg/kg X/ 0.5mg/kg X/ Beryllium PGDP-SW846-6010A 0.5mg/kg X/ Boron PGDP-SW846-6010A Beryllium PGDP-5W846-6010A 0.89mg/kg X/ 100mg/kg X/ Вогон PGDP-SW846-6010A 100 nw/kg X/ Cadmium Boron PGDP-SW846-6010A PGDP-SW146-6010A 100mg/kg X/ 2mg/kg X/ Cadmiuna PODP-SWEED-6010A 2mg/kg X/ Calcium Cadnawa PGDP-SW846-6010A PGDP-5WE46-6010A 1390mg/kg X/ 2mg/kg X/ Calcium PGDP-SW846-4010A 980mg/kg X/ Chroniuns Calcium PGDP-SW846-6010A FGDF-SW846-6010A 13.7mg/kg X/ 1620 mg/kg X/ Chromium PODP-SW846-6010A 8.24mg/kg X/ Cobalt Chromium PGDP-5W846-6010A PGDP-5W844-6010A 3.94mg/kg X/ 26.4mg/kg X/ Cobalt PGDP-SW846-6010A 4.55mg/kg XJ Cobalt Copper PGDP-SW\$46-6010A PGDP-SW146-6010A 6.54mg/kg X 3.96mg/kg X/ Copper PGDP-SW846-6010A 3.48mg/kg X/ Iron Copper PGDP-SW\$46-6010A PGDP-5W846-6010A 4.56 nig/kg X \$580mg/kg X/ Irou PGDP-SW146-6010A 8950mg/kg X/ Lead Iron PGDP-SWE46-6010A PGDP-5W846-6010A 16300mg/kg X 20mg/kg X/ Lead PGDP-SW846-6010A 20mg/kg X/ Lithium Lead PGDP-SW846-6010A PGDP-SWE46-6010A 7.17mg/kg X/ 20mg/kg X Lithium PGDP-SW840-6010A 6.68mg/kg X/ Lithium Magnesium PGDP-SWI16-6010A PGDP-SW846-6010A 1340mg/kg X/ 5.94mg/kg X/ Magnesium PODP-SW146-6010A #31mg/kg X/ Manganese PGDP-SW146-6010A Magnesium PODP-SW146-6010A 112mg/kg X/ 1000mm/kg X/ Manganese PGDP-SW146-6010A 36.8mg/kg X/ Mercury PGDP-SW846-7471 Manganese PGDP-SW146-6010A 0.2mg/kg X/ 69.8 mg/kg X/ Mercury PGDP-SW846-7471 0.2 mg/kg X/ Vickel Mercury PGDP-SW#46-6010A PGDP-SW846-7471 7.26mg/kg X/ 0.2mg/kg X/ Nickel PGDP-5W146-6010A Snig/kg X/ Potassium Nickel PGDP-SW846-6010A PGDP-SW146-6010A 303mg/kg X/ Smarke XI Potassium PGDP-5W846-6010A Minu/kg X/ Selenium PGDP-SW846-7740 Potassium PGDP-SW846-6010A ing/kg X/ 263mg/kg X/ Sclenium PGDP-SW846-7740 Inwks XI Silver Selenium PGDP-SW846-6010A PGDP-5W846-1740 4mg/kg X/ Silver Img/kg X/ PGDP-5W846-6010A 4ng/kg X/ Sodium Silver PODP-SWE46-6010A PGDP-SW846-6010A 363mg/kg X/ 4mg/kg X/ Sodium PODP-5W846-6010A JiSnwke X Strontium Sodium PGDP-SW145-6010A PGDP-SWE46-6010A 12.2mg/kg X/ Joong/kg X/ Strontium PODP-SW846-6010A 7.46mg/kg X/ Challium Strontium PGDP-SW846-6010A PGDF-SW846-6010A ISnacke X 7.33mg/kg X Thallians PODP-SWEEG-GOIGA 15um/kg X/ √anadium: Thallium PGDP-5W846-6010A PGDP-SW846-6010A 18.5mg/kg X/ ISnu/kg X/ Vanadium PGDP-SW146-6410A Zinc 17.5mg/kg X/ Vanadiun PGDP-5W846-6010A PGDP-SW846-6010A 28.2mg/kg X/ Zinc 45mg/kg X PGDP-SWB45-0010A 15mg/kg X/ Zinc WETCHEM PODP-SWE46-6010A 22mg/kg X/ WETCHEM WETCHEM Thromium, hexavalent PGDP-SM-3300-Cr D 17 JU 0.5mg/kg X/ Chromium, hexavalent PGDP-SM-3500-Cr D 17 JU 0.5mg/kg X/ -yanide Chromium, hexavalent PGDP-SW846-9014 PGDP-SM-3500-Cr D 17 JU 0.5mg/kg X/ Imp/kg X/ PGDP-SW846-9014 Img/kg X Cyanide

PGDP-SW846-9014

lang/kg X/

|                   | Lab Que                 |           | V/A*          | 1                   |                 |                           | F 101-3.4  |               | ( - · · · · · · · · · · · · · · · · · · |                              |          |            |            |
|-------------------|-------------------------|-----------|---------------|---------------------|-----------------|---------------------------|------------|---------------|---|------------------------------|----------|------------|------------|
| Analysis          | Method and Re           |           | lts Codes     | Analysis            |                 | ab Qualific<br>and Result |            | V/A*<br>Codes | Analysis                                |                              | Qualifie |            | V/A*       |
|                   | ple ID: 194010SA030     | 1         |               | Samp                | le ID: 194011   | SA005                     |            |               |   |                              | Result   | Units      | Codes      |
| Station: 194-010  | MEDIA: SO               | Depth -   | 27 to 30 feet | Station: 194-011    | MEDIA           |                           | Death -    | 1 to 6 feet   | Station: 194-011                        | le ID: 194011SA              | .010     |            |            |
| METAL             |                         |           |               | 10 AV 1817/1950000  |                 |                           | Depti -    | 2 10 2 1661   | Station: 194-011                        | MEDIA: SO                    |          | Depth -    | 7 to 10 fe |
| Maning            |                         |           |               | METAL               |                 |                           |            |               | METAL                                   |                              |          |            |            |
|                   | PGDP-SW846-6010A .*H    | 12101110  | w w           | Alterelouns         | PGDP-SW846-60   | WH" ADI                   | 11300mg/kg | XV            | Abeninum                                |                              |          |            |            |
| ntimony           | PGDP-5W146-6010A NU     | 20mg/1    | K X/          | Antimony            | PGDP-SW846-40   |                           | 20mm/kg    |               |   | PGDP-SW846-6010A             | .ww      | 764Gmg/kg  | X/         |
| rsenic            | PGDP-SW846-7660 UW      | Sang/k    | * XI          | Arseule             | PGDP-SW146-70   | 66 UW                     | Smg/kg     |               | Antisony                                | PGDP-SWEHS-6010A             | MU       | 20mg/kg    | X/         |
| (rium             | PGDP-SWE46-6010A N      | 13mg/k    | E X/          | Darium              | PGDP-SW846-60   | HOA N                     | \$2.4mg/kg |               | Arsenic                                 | PGDP-SW846-7060              | UW       | Smy/kg     | X/         |
| eryllium          | PGDF-SWE46-6010A        | 1.17mg/k  | g XI          | Beryllium           | PGDP-5WEH-40    | 104                       | 4. Emple   |               | Barium                                  | PGDP-SW846-6010A             | н        | 45.4mg/kg  | X/         |
| orois ,           | PGDP-5W846-6010A NU     | 100mg/k   | z ×           | Boros               | PGDP-SW146-00   | IGA NU                    | 100mg/kg   |               | Beryllium                               | PGDP-SW846-6010A             | U        | 0.5mg/kg   | X/         |
| dovium            | PGDP-SW846-6010A U      | 2mg/k     | , w           | Cadmium             | PGDP-SW846-60   |                           | 2mg/kg     |               | Doros                                   | PGDP-SWE46-6010A             | NU       | 100mg/kg   | w          |
| lgium.            | PGDP-SW846-6010A NW     | 269mg/k   | , w           | Catchan             | PGDP-SW846-60   |                           | 1240mg/kg  |               | Cadmium                                 | PGDP-SW846-6010A             | U        | 2mg/kg     | X/         |
| rpnium            | PGDP-SW146-6010A        | 53.7mg/k  | ı xı          | Chronium            | PGDP-5WE46-60   | 2000                      | 170.70     |               | Cakium                                  | PGDP-SW846-6010A             | NW       | 1190mg/kg  | X/         |
| bale.             | PGDP-SW146-6010A        | 4.04mg/k  | , x/          | Cobalt              | PGDP-SW846-601  | 357                       | 15.lmg/kg  |               | Chronium                                | PGDP-SW846-6010A             |          | 11.4mg/kg  | X/         |
| njer<br>-         | PGDP-SWEEL-6010A        | 2.51 mg/k | , xu          | Copper              | PGDP-SW844-601  |                           | 3.46mg/kg  |               | Cobalt                                  | PGDP-SWE46-6010A             |          | Jmg/kg     | X/         |
| •                 | PGDP-SWI46-6010A *NY    | 20700mg/k | w             | Iron                | PGDP-SW846-601  |                           | 9.51mg/kg  |               | Copper                                  | PGDP-SWE46-6010A             |          | 4.34 mg/kg | X/         |
| 4                 | PGDP-SW146-6010A U      | 20mg/k    | w             | Lead                | PGDP-SW146-001  |                           | 3600mg/kg  |               | lion                                    | PGDP-5W846-6010A             | *NW      | 6410mg/kg  | X/         |
| Huns              | PGDP-SWE46-6010A        | 2.33ng/kj | S             | Lithiuns            | PGDP-SW146-601  |                           | 20nwkg     |               | Lead                                    | PGDP-SW846-6010A             | U        | 20 nig/kg  | X/         |
| presium           | PGDP-SWE46-6010A *NW    | 164mg/kg  |               | Magnesium           | PGDP-SWE(6-40)  |                           | 8.84mg/kg  |               | Lithium                                 | PGDP-5W346-6010A             |          | 4.78mg/kg  | X/         |
| dance             | PGDP-5W846-6010A        | 24mg/kg   |               | Manganese           | PGDP-SW146-601  | NO.                       | 2340sig/kg |               | Magnesium                               | PGDP-SW846-6010A             | *NW      | 957mg/kg   | x          |
| <b>IQ</b> UIY     | PGDP-SW846-7471 U       | 0.2mg/kg  |               | Mercury             |                 |                           | 210mg/kg   |               | Manganese                               | PGDP-SW846-6010A             |          | 34.9mg/kg  | X/         |
| kgt               | PGDP-SW146-6010A        | 7.18mg/kg |               | Nickel              | PGDP-SW846-747  |                           | 0.2 mg/kg  | X/            | Meteury                                 | PGDP-5W846-7471              | U        | 0.2mg/kg   | X/         |
| en i i i i        | PGDP-SW846-6010A H      | 109mg/kg  | [             | otassium            | PGDP-SWE46-601  |                           | 10.9mg/kg  | x             | Nickel                                  | PGDP-SWE46-6010A             | U        | Smg/kg     |            |
| raium             | PGDP-SW146-7740 UW      | lang/kg   |               | iclenium            | PGDP-5WE46-6016 |                           | 632 nw/kg  | X/            | Potassium                               | PGDP-SW846-6010A             | N        | 219mg/kg   |            |
| er                | PGDP-SW846-6010A U      | 4mg/kg    |               |                     | PGDP-SW846-774  |                           | Img/kg     | x/            | Selenium                                | PGDP-SW846-7740              | UW       | Img/kg     |            |
| ium               | PGDP-SW146-6010A U      | 200mg/kg  |               | illver              | PGDP-SW846-6010 |                           | 4mg/kg     | x/            | Silver                                  | PGDP-SW846-6010A             | U        | 4mg/kg     |            |
| ntium             | PGDP-SW846-6010A *NU    |           |               | odium               | FGDF-5W846-4010 | PA                        | 369mg/kg   | x/            | Sodiuhe                                 | PGDP-SW446-6010A             |          |            |            |
| Kuna              | PGDP-SWE46-6010A NU     | 2mg/kg    |               | trontlum            | PGDP-5W846-6010 | N* A                      | 16.4mg/kg  | xu i          | Strontium                               | PGDP-SW846-6010A             | •н       | 324mg/kg   |            |
| adium             | PGDP-SWE46-6010A        | 15mg/kg   |               | hallion             | PGDP-SW846-0010 | M NU                      | (Sum/kg    | x/            | Thellies                                | PGDP-SW#44-6010A             | NU       | 9.16mg/kg  |            |
|                   | PGDP-SWI46-6010A *N     | 63mg/kg   |               | 'anadium            | PGDP-SW#40-6010 | M                         | (Smg/kg    | x             | Vanudium                                | PGDP-SWE46-6010A             |          | 15mg/kg    |            |
| TCHEM             | Animonia, 'N            | 26.2mg/kg | X/  2         | ine '               | PGDP-5W846-6010 | N 'N                      | 47mg/kg    | 37            | Zinc                                    |                              |          | 17.5 mg/kg |            |
| omium, hexavalent | PCD4 214 14-1           |           | h             | VETCHEM             |                 |                           |            |               | WETCHEM                                 | VOID SHEET NAME OF THE PARTY | •и       | 21.2mg/kg  | X/         |
| 20                | PGDP-SM-1300-Cr D 17 JU | 0.5mg/kg  | xu c          | hromium, hexavalent | PODP-SM-1300-Cr | D I7 AU                   | O.Smg/kg   |               |   |                              |          |            |            |
| mide ,1           | PGDP-SW846-9014 U       | lmg/kg    | w  c          | yanide              | PGDP-SW246-9014 | U                         | Img/kg     |               | Chronium, hexavalent                    | PGDP-SM-3500-Cr D 13         | NI.      | 0.5mg/kg   | x/         |
|                   |                         |           | - 5           |                     |                 | 3                         |            |               | Cyanide                                 | PGDP-SW\$46-9014             | U        | long/kg    | X/         |

| Anatysis         | Method an            | Qualifi<br>d Resul | ter       | V/A*   | Analysis                                |                         | Lab Qualif |            | V/A*          |                      |                               | Qualifi |             | V/A*       |
|------------------|----------------------|--------------------|-----------|--|---|-------------------------|------------|------------|---------------|----------------------|-------------------------------|---------|-------------|------------|
| Sam              | ple ID: 194011SA     | 1015               |           |  | Same                                    |                         |            |            | Codes .       | Analysis             | Method And                    | Resul   | Units       | Codes      |
| lation: 194-013  | MEDIA: SO            | E                  | Depth =   | 12 to 15 feet  | Station: 194-011                        | ole ID: 19401<br>MEDIA: |            | Depth = 1  | 17 to 20 feet |                      | ple ID: 194011SA<br>MEDIA: SO |         |             |            |
| ETAL             |                      |                    |           |  | L.:                                     |                         |            | - 55       |               |                      | media: 30                     | 8       | Depth = 2   | 7 to 30 fc |
| unimum           | PGDP-SWEEL-6010A     | "NW                | 5380me/kg |  | METAL                                   |                         |            |            |               | METAL                |                               |         |             |            |
| timony           | PGDP-SW146-6010A     | NU                 | 20mg/kg   |  | Aluminus                                | PGDP-SWE46-G            |            | 6370mg/kg  | , xu          | Aluminum             | PGDP-SWE46-6010A              | *NW     | 1000 1      |            |
| senie            | PGDP-5W846-7060      | UW                 | Smy/kg    |  | Antinony                                | PGDP-SWE46-M            | UM ADI     | 20 ng/kg   | , xv          | Authony              | PGDP-5W846-6010A              | NU      | 3840mg/kg   | 10000      |
| rium             | PGDP-SW848-6010A     | N                  | 20.5mg/kg |  | Arsenic                                 | PGDP-SW846-70           | 160 W      | 6.05mg/kg  | שו            | Arsenic              | PGDP-5W844-7060               | UW      | 20 mg/kg    |            |
| ylliwn           | PGDP-SWB46-6010A     | u                  |           |  | Darium                                  | PGDP-\$W846-60          |            | 14.6ng/kg  | , xu          | Darium               | PGDP-SW846-6010A              | N.      | 5mg/kg      |            |
| On               | PGDP-SW846-6010A     | NU                 | 0.5mg/kg  |  | Beryllium                               | PGDP-SWE46-64           | NOA        | 0.63mg/kg  | , w           | Deryllium            | PGDP-SW846-6010A              |         | 11.9mg/kg   |            |
| Insium           | PGDP-SW848-6010A     | U                  | 100mg/kg  |  | Doron                                   | PGDP-SW146-40           | UM API     | 100mg/kg   | w             | Horon                | FGDP-SW846-6010A              | NU      | 1.28mg/kg   |            |
| cium             | PGDP-SW816-6010A     | NW                 | 2mg/kg    |  | Cadmium                                 | PGDP-5W846-40           |            | 2mg/kg     | XV .          | Cadmium              | PGDP-SW846-8010A              | U       | 100mg/kg    |            |
| Desaitages       | PGDP-SW146-6010A     | 2000               | 56# mg/kg |  | Calcium                                 | PGDP-EW846-60           | WH ADI     | 628mg/kg   | w             | Calcium              | PGDP-SWE46-6010A              | NW      | 2mg/kg      |            |
| ale              | PGDP-SW846-6010A     |                    | 21.3mg/kg |  | Chromium                                | PGDP-SW846-40           | 104        | 23.3mg/kg  | ×             | Chronium             | PGDP-SW845-6010A              | um      | 348ng/kg    |            |
| per              | PGDP-SW846-6010A     |                    | 4.07mg/kg | 52% Y  | Cobalt                                  | PGDP-SW844-60           | 104        | 1.49mg/kg  | XV            | Cobali               | PGDP-SW846-6010A              |         | 44. I mg/kg |            |
|                  | PGDP-SW846-6010A     | 'NW I              | 2.41mg/kg | - 1  | Copper                                  | FGDP-5W246-60           | 10A U      | 2mg/kg     |               | Copper               |                               |         | 5.56mg/kg   |            |
| 4                | PGDP-SWE44-6010A     | U ,                | 2400mg/kg | 000  | lros.                                   | PGDP-SWE46-60           | WIN ADI    | 28000mw/kg |               | iron                 | PGDP-SWE46-6010A              | 823333  | 2.37mg/kg   |            |
| ium              | PGDP-5W346-6010A     | ŏ,                 | 20mg/kg   | [  | lead                                    | PGDP-5W846-401          |            | 20mg/kg    |               | Lead                 | PGDP-SW146-6010A              |         | 31700mg/kg  | X/         |
| nesium           | PGDP-SWE45-6010A     | 'NW                | 2.41mg/kg | The state of the s | Lithium                                 | PGDP-SW846-601          | 10A U      | 2nu/kg     | X/            | Lithium              | PGDP-SW846-6010A              | U       | 30 mfk/rR   | X/         |
| ganese           | PGDP-SW846-6010A     | AMME.              | 415mg/kg  | 333 ar   | dagoesium                               | PGDP-SWI146-601         | WW AD      | 390mg/kg   |               | Magnesium            | PGDP-5W846-6010A              | U       | 2mg/kg      | X/         |
| nury             | PGDP-SW845-7471      |                    | 37.8mg/kg |  | danganeso                               | PGDP-SW840-601          | OA .       | 56.7mg/kg  |               |                      | FGDF-5 WB48-8010A             | "NW     | 170mg/kg    | X/         |
| el               |                      | U                  | 0.2mg/kg  | ×  | descury                                 | PGUP-SW846-747          |            | 0.2mg/kg   |               | Manganese            | PGDP-SW846-6010A              |         | 109mg/kg    | X/         |
| ssium            | PGDP-SW846-6010A     | U                  | Smy/kg    | ×  | fickel                                  | PGDP-SW846-401          | •A U       | · Snw/kg   |               | Mercury              | PGDP-5W846-7478               | U       | 0.2mg/kg    | X/         |
| nium             | PGDP-SW846-6010A     | N                  | 153mg/kg  | X  | otassiuna                               | PGDP-SW846-401          | 0A N       | i64ng/kg   |               | Nickel               | PGDP-SWE46-6010A              |         | 12.8mg/kg   | ×          |
|                  | PGDP-SW844-7740      | UW                 | Inw/kg    | w s  | clenium                                 | PGDP-8W846-374          |            | 35 50      |               | Potassium            | FGDF-SW140-6010A              | NU      | 100ng/kg    | X          |
|                  | PGDP-SW146-6010A     | U                  | 4mg/kg    | x s  | ilver                                   | PGDP-SW846-6016         | S          | Ing/kg     |               | Sclenium             | PGDP-SW146-7740               | UW      | log/kg      | X/         |
| 411              |                      | U                  | 200mg/kg  | x s  | odium                                   | PGDP-5W846-6010         | 78 B       | 4mg/kg     |               | Silver               | PGDP-SW846-6010A              | U       | 4mg/kg      | ×          |
| ljums            | PGDP-SW846-6010A     | 'N ;               | .92mg/kg  | x s  | Fontium                                 | PGDP-SW844-6010         |            | 200mg/kg   |               | Sodium               | PGDP-SW846-6010A              | U       | 200 mg/kg   |            |
| witte            | PGDP-SW146-6010A     | NU                 | 15mg/kg   | w  T   | hallium                                 | PGDP-SW846-6010         |            | 2.86mg/kg  | 1             | Stroetium            | PGDP-5W846-6010A              | 'NU     | 2mg/kg      |            |
| Fium.            | PODP-SWEIG-GOIGA     | 2                  | 3.6mg/kg  |  | wadium                                  |                         |            | 15mg/kg    | x             | Thallium             | FGDP-SW146-6010A              | NU      | 15mg/kg     |            |
|                  | PGDP-SWE46-6010A     | ·N 1               | 4. Imply  |  | nc .                                    | PGDP-SW144-4014         |            | 44.2mg/kg  | w             | Vanadium             | PGDP-SW846-6010A              |         | 57.4mg/kg   |            |
| CHEM             |                      |                    | 35        |  | ETCHEM                                  | PGDP-SW844-4010         | W •M       | 22mg/kg    | w             | Zinc                 | PGDP-SW846-6010A              | *N      | 61.Emg/kg   |            |
| oinn, bezavalent | PGDP-SM-3500-Cr D 17 | N                  | 0.5mg/kg  |  | 16.000000000000000000000000000000000000 | 0.000000000             | 10         | 15 03      | ŀ             | WETCHEM              |                               |         |             |            |
| de .             |                      | U                  | Inw/kg    | [  | romium, bearvalent                      | PGDP-SM-1500-Cr         |            | 0.5mg/kg   | × 6           | Chromium, bexavalent | PGDP-SM-3500-Cr D 17          | ***     |             |            |
|                  |                      |                    |           | - (c)  | ranide                                  | PGDP-SW844-9014         | U          | Ing/kg     |               | Cyanide              | PGDP-5W846-9014               |         | 0.5mg/kg    | X.         |



#### 6/22/00 Page 1 of 1

### Data Collected from Sediment near Outfall 017

| Colle | cted    | Qualifiers           | Results     | Units  | Det Lim | Counting<br>Error     | Lab                 | Method            | Footnote                                |
|-------|---------|----------------------|-------------|--|---------|-----------------------|---------------------|-------------------|---|
| K017  | ,       |                      |             |  |         |                       |                     |                   |   |
| METAL | •       | Uranium              |             |  |         |                       |                     |                   | *************************************** |
|       | 9/2/99  | X                    | 3.87        | pCi/g  | 1.38    | 5.37                  | PGDP                | RL-7124           |   |
| PPCB  |         | PCB-1016             | 3           |  |         |                       |                     |                   |   |
|       | 9/2/99  | U                    | 100         | ug/kg  | 100     |                       | PGDP                | SW846-8082        |   |
| PPCB  |         | PCB-1221             | 1           |  |         |                       |                     |                   |   |
|       | 9/2/99  | U                    | 100         | ug/kg  | 100     |                       | PGDP                | SW846-8082        |   |
| PPCB  |         | PCB-1232             | 2           |  | 305-88E |                       |                     |                   |   |
|       | 9/2/99  | U                    | 100         | ug/kg  | 100     |                       | PGDP                | SW846-8082        |   |
| PPCB  |         | PCB-1242             | 1           | -100-0-0   |         |                       |                     |                   |   |
|       | 9/2/99  | U                    | 100         | ug/kg  | 100     |                       | PGDP                | SW846-8082        |   |
| PPCB  |         | PCB-1248             |             | -  |         |                       |                     |                   |   |
|       | 9/2/99  | U                    | 100         | ug/kg  | 100     |                       | PGDP                | SW846-8082        |   |
| PPCB  |         | PCB-1254             |             | (3) (3)  |         |                       |                     |                   |   |
|       | 9/2/99  | U                    | 100         | ug/kg  | 100     |                       | PGDP                | SW846-8082        |   |
| PPCB  |         | PCB-1260             | 1000        |  |         |                       |                     |                   |   |
|       | 9/2/99  | U                    | 100         | ug/kg  | 100     |                       | PGDP                | SW846-8082        |   |
| PPCB  |         | PCB-1268             | / enautro   | 10171070   |         |                       |                     |                   |   |
|       | 9/2/99  | U                    | 100         | ug/kg  | 100     |                       | PGDP                | SW846-8082        |   |
| PCB   |         | Polychlor            | inated bipl | nenvi  |         |                       |                     |                   |   |
|       | 5/16/94 | U                    | 100         | ug/kg  |         |                       | PGDP                | SW846-8080        |   |
|       | 9/2/99  | U                    | 100         | ug/kg  | 100     |                       | PGDP                | SW846-8082        |   |
| RADS  |         | Alpha acti           | vity        | 0.0  |         |                       |                     |                   |   |
|       | 9/2/99  |                      | 16.38       | pCi/g  | 6.74    | 6.42                  | PGDP                | RL-7119           |   |
|       | 9/2/99  |                      | 10.18       | pCi/g  | 1.89    | 1.53                  | PGDP                | RL-7111           |   |
| RADS  |         | Americiun            | n-241       | 3 (3)() Ex   |         |                       | 0.000000            | RETERVISER        |   |
|       | 9/2/99  | Α                    | -0.0197     | pCi/g  | 0.094   | 0.0395                | PGDP                | RL-7124           |   |
| RADS  |         | Beta activ           |             |  |         |                       | ALTERNA !           |                   |   |
|       | 9/2/99  |                      | 6.69        | pCi/g  | 0.83    | 0.6                   | PGDP                | RL-7111           |   |
|       | 9/2/99  |                      | 7.49        | pCi/g  | 2.52    | 1.95                  | PGDP                | RL-7119           |   |
| RADS  |         | Neptuniur            |             | 25 1628  |         |                       |                     |                   | 54                                      |
|       | 9/2/99  | Α                    | -0.0047     | pCi/g  | 0.047   | 0.0094                | PGDP                | RL-7124           |   |
| ADS   |         | Plutonium            |             | 100000000000000000000000000000000000000  | 2000    |                       | Abarterent          |                   |   |
|       | 9/2/99  |                      | 0.0244      | pCi/g  | 0.0098  | 0.0072                | PGDP                | RL-7120           |   |
| ADS   |         | Technetiu            |             | 400000000  |         |                       | 17.14 TATE          | 1 (44-10)/2000/00 |   |
|       | 9/2/99  | 14176030118403131140 | 0.373       | pCi/g  | 0.233   | 0.191                 | PGDP                | RL-7115           |   |
| ADS   |         | Thorium-2            |             | A CONTRACTOR OF THE PARTY OF TH |         | CONTRACTOR CONTRACTOR | 90 <del>774</del> 6 |                   |   |
|       | 9/2/99  |                      | 0.684       | pCi/g  | 0.1     | 0.0405                | PGDP                | RL-7120           |   |

#### Lab Qualifiers

- A Analyzed but not detected at the analyte quantitation limit.
- U Analyte analyzed for but not detected at or below the lowest concentration reported.
- X Other specific flags and footnotes may be required to properly define the results.

4w

Paducah Gaseous Diffusion Plant Analytical Chemistry Department Results of Analyses

Customer Name:

Sample Matrix:

SOLIDS

Customer Sample Number: RC-3874

Date Sample Received: 5-APR-1990

Lab Sample Number: Date Sample Completed: 19-APR-1990

Material Description: K-017 FLUME (1"- 6")

4-APR-1990 00:00:00

Sampled By:

MGK/WRB

Project #:

Sampled From: K017 A

Sampling Proc:

5-POINT COMPOSITE DIRT Comment: TSR Number:

| Proc No. | Analysis | Result | Units   | Qualifiers | Analyst      | Date Analyzed                           | Date Completed    |   |
|----------|----------|--------|---------|------------|--------------|---|-------------------|---|
|          |          | ****   | ******* |            | **********   | ======================================= |                   |   |
| R        | Np-237   | 0      | ng/G    |            | SE LEIDECKER |   | 18-APR-1990 20:35 | j |
|          | Pu-239   | n/a    | ng/     |            | SE LEIDECKER |   | 18-APR-1990 20:35 | j |
|          | Tc-99    | n/a    | ug/     |            | SE LEIDECKER |   | 18-APR-1990 20:35 | j |
|          | Th-230   | n/a    | ng/     |            | SE LEIDECKER |   | 18-APR-1990 20:35 | j |
|          | υ        | 2      | ug/G    |            | SE LEIDECKER |   | 18-APR-1990 20:35 | į |
|          | U-235    | . 7    | wt.%    |            | SE LEIDECKER |   | 19-APR-1990 07:30 | , |

Paducah Gaseous Diffusion Plant Analytical Chemistry Department Results of Analyses

Result

Units

Customer Name:

4w

Customer Sample Number: RC-3875

Date Sample Received: 5-APR-1990

Analysis

Sample Date:

4-APR-1990 00:00:00

Material Description: K-017 FLUME (1"- 6")

Sampled From: K017 B

Comment:

5-POINT COMPOSITE DIRT

TSR Number:

Proc No.

Sample Matrix:

SOLIDS

Lab Sample Number: 900405-197

Date Sample Completed: 19-APR-1990

MGK/WRB

Project #: Sampling Proc:

| Qualifiers | Analyst      | Date Analyzed | Date Completed  |
|------------|--------------|---------------|-----------------|
| =========  |              |               |                 |
|            | SE LEIDECKER |               | 18-APR-1990 20: |
|            | SE LEIDECKER |               | 18-APR-1990 20  |

|   |        | ======= |      |              |                   |
|---|--------|---------|------|--------------|-------------------|
| R | Np-237 | 0       | ng/G | SE LEIDECKER | 18-APR-1990 20:36 |
|   | Pu-239 | n/a     | ng/  | SE LEIDECKER | 18-APR-1990 20:36 |
|   | Tc-99  | n/a     | ug/  | SE LEIDECKER | 18-APR-1990 20:36 |
|   | Th-230 | n/a     | ng/  | SE LEIDECKER | 18-APR-1990 20:36 |
|   | U      | 2       | ug/G | SE LEIDECKER | 18-APR-1990 20:36 |
|   | U-235  | .7      | wt.% | SE LEIDECKER | 19-APR-1990 07:30 |
|   |        |         |      |              |                   |

Paducah Gaseous Diffusion Plant Analytical Chemistry Department Results of Analyses

Customer Name:

Customer Sample Number: RC-3876 Date Sample Received: 5-APR-1990

0-235

44

Sample Date:

4-APR-1990 00:00:00 Material Description: K-017 FLUME (1"- 6")

Sampled From: K017 C

TSR Number:

Comment: 5-POINT COMPOSITE DIRT

Sample Matrix:

SOLIDS

Lab Sample Number: 900405-198

Date Sample Completed: 19-APR-1990

19-APR-1990 07:31

Project #:

Sampling Proc:

| Proc No. | Analysis                                | Result | Units    | Qualifiers | Analyst      | Date Analyzed                           | Date Completed    |
|----------|---|--------|----------|------------|--------------|---|-------------------|
| ******** | *************************************** |        | ******** |            |              | *************************************** | ***********       |
| R        | Np-237                                  | 0      | ng/G     |            | SE LEIDECKER |   | 18-APR-1990 20:36 |
|          | Pu-239                                  | n/a    | ng/      |            | SE LEIDECKER |   | 18-APR-1990 20:36 |
|          | Tc-99                                   | n/a    | ug/      |            | SE LEIDECKER |   | 18-APR-1990 20:36 |
|          | Th-230                                  | n/a    | ng/      |            | SE LEIDECKER |   | 18-APR-1990 20:36 |
|          | σ                                       | 2      | ug/G     |            | SE LEIDECKER |   | 19-APR-1990 07:31 |

.7 Wt.\$

Approved By: RE SYRD

Date Approved: 19-APR-1990

SE LEIDECKER

Sample Matrix:

Sampled By:

Project #:

Lab Sample Number: 900405-199

Date Sample Completed: 18-APR-1990

MGK/WRB

Paducah Gaseous Diffusion Plant Analytical Chemistry Department Results of Analyses

Customer Name:

Customer Sample Number: RC-3877

Date Sample Received: 5-APR-1990

Sample Date: 4-APR-1990 00:00:00

Material Description: K-017 FLUME (6"- 12")

Sampled From: K017 A

TSR Number:

Comment: 5-POINT COMPOSITE DIRT

Sampling Proc:

| Proc No. | Analysis | Result | Units | Qualifiers | Analyst      | Date Analyzed                           | Date Completed    |
|----------|----------|--------|-------|------------|--------------|---|-------------------|
|          |          | *****  |       | ********** |              | ======================================= |                   |
| R        | Np-237   | 0      | ng/G  |            | SE LEIDECKER |   | 18-APR-1990 20:38 |
|          | Pu-239   | n/a    | ng/   |            | SE LEIDECKER |   | 18-APR-1990 20:38 |
|          | Tc-99    | n/a    | ug/   |            | SE LEIDECKER |   | 18-APR-1990 20:38 |
|          | Th-230   | n/a    | ng/   |            | SE LEIDECKER |   | 18-APR-1990 20:38 |
|          | υ        | 3      | ug/G  |            | SE LEIDECKER |   | 18-APR-1990 20:38 |
|          | U-235    | .71    | wt.%  |            | SE LEIDECKER |   | 18-APR-1990 20:38 |

Paducah Gaseous Diffusion Plant Analytical Chemistry Department Results of Analyses

Customer Sample Number: RC-3878 Date Sample Received: 5-APR-1990

Sample Date:

4-APR-1990 00:00:00

Material Description: K-017 FLUME (6"- 12")

Sampled From: K017 B

Comment: 5-POINT COMPOSITE DIRT

TSR Number:

Sample Matrix:

SOLIDS

Lab Sample Number:

Date Sample Completed: 18-APR-1990

MGK/WRB

Sampled By:

Project #:

Sampling Proc:

| Proc No.                                | Analysis | Result | Units | Qualifiers | Analyst      | Date Analyzed                           | Date Completed    |
|---|----------|--------|-------|------------|--------------|---|-------------------|
| ======================================= |          | ****** |       |            |              | ======================================= |                   |
| R                                       | Np-237   | 0      | ng/G  |            | SE LEIDECKER |   | 18-APR-1990 20:39 |
|   | Pu-239   | n/a    | ng/   |            | SE LEIDECKER |   | 18-APR-1990 20:39 |
|   | Tc-99    | n/a    | ug/   |            | SE LEIDECKER |   | 18-APR-1990 20:39 |
|   | Th-230   | n/a    | ng/   |            | SE LEIDECKER |   | 18-APR-1990 20:39 |
|   | υ        | 2      | ug/G  |            | SE LEIDECKER |   | 18-APR-1990 20:39 |
|   | U-235    | . 71   | wt.%  |            | SE LEIDECKER |   | 18-APR-1990 20:39 |

Paducah Gaseous Diffusion Plant Analytical Chemistry Department Results of Analyses

Customer Name:

Customer Sample Number: RC-3879 Date Sample Received: 5-APR-1990

Sample Date:

4-APR-1990 00:00:00

Material Description: K-017 FLUME (6"- 12")

Sampled From: K017 C

TSR Number:

Comment: 5-POINT COMPOSITE DIRT

Sample Matrix:

SOLIDS

Lab Sample Number:

900405-201

Date Sample Completed: 18-APR-1990

Sampled By:

MGK/WRB

Project #:

Sampling Proc:

| Proc No. | Analysis | Result  | Units   | Qualifiers | Analyst      | Date Analyzed | Date Completed    |
|----------|----------|---------|---------|------------|--------------|---------------|-------------------|
|          |          | ======= | ======= |            |              | ********      | *****             |
| R .      | Np-237   | 0       | ng/G    |            | SE LEIDECKER |               | 18-APR-1990 20:40 |
|          | Pu-239   | n/a     | ng/     |            | SE LEIDECKER |               | 18-APR-1990 20:40 |
|          | Tc-99    | n/a     | ug/     |            | SE LEIDECKER |               | 18-APR-1990 20:40 |
|          | Th-230   | n/a     | ng/     |            | SE LEIDECKER |               | 18-APR-1990 20:40 |
|          | <b>u</b> | 3       | ug/G    |            | SE LEIDECKER |               | 18-APR-1990 20:40 |
|          | U-235    | .71     | wt.%    |            | SE LEIDECKER |               | 18-APR-1990 20:40 |

Paducah Gaseous Diffusion Plant Analytical Chemistry Department Results of Analyses

Customer Name:

Customer Sample Number: RC-3880

Date Sample Received: 5-APR-1990

Sample Date: 4-APR-1990 00:00:00

Material Description: K-017 APRON (1"- 6")

Sampled From: K017 A

Comment: 5-POINT COMPOSITE DIRT

TSR Number:

Sample Matrix:

Lab Sample Number: 900405-202

Date Sample Completed: 18-APR-1990

MGK/WRB

Sampled By: Project #:

Sampling Proc:

| Proc No. | Analysis | Result | Units   | Qualifiers | Analyst      | Date Analyzed | Date Completed    |
|----------|----------|--------|---------|------------|--------------|---------------|-------------------|
| ======== |          |        | ======= |            |              |               |                   |
| R        | Np-237   | 0      | ng/G    |            | SE LEIDECKER |               | 18-APR-1990 20:40 |
|          | Pu-239   | n/a    | ng/     |            | SE LEIDECKER |               | 18-APR-1990 20:40 |
|          | TC-99    | n/a    | ug/     |            | SE LEIDECKER |               | 18-APR-1990 20:40 |
|          | Th-230   | n/a    | ng/     |            | SE LEIDECKER |               | 18-APR-1990 20:40 |
|          | υ        | 2      | ug/G    |            | SE LEIDECKER |               | 18-APR-1990 20:40 |
|          | U-235    | . 71   | wt.%    |            | SE LEIDECKER |               | 18-APR-1990 20:40 |

Sample Matrix:

Sampled By:

Sampling Proc:

Project #:

Lab Sample Number: 900405-203

Date Sample Completed: 18-APR-1990

MGK/WRB

4w

Paducah Gaseous Diffusion Plant Analytical Chemistry Department Results of Analyses

Customer Name:

Customer Sample Number: RC-3881

Date Sample Received: 5-APR-1990

Sample Date:

4-APR-1990 00:00:00

Material Description: K-017 APRON (1"- 6")

Sampled From: K017 B

TSR Number:

Comment: 5-POINT COMPOSITE DIRT

| Proc No. | Analysis | Result  | Units | Qualifiers | Analyst      | Date Analyzed | Date Completed    |
|----------|----------|---------|-------|------------|--------------|---------------|-------------------|
| *******  |          | ======= |       |            |              | ************  |                   |
| R        | Np-237   | 0       | ng/G  |            | SE LEIDECKER |               | 18-APR-1990 20:41 |
|          | Pu-239   | n/a     | ng/   |            | SE LEIDECKER |               | 18-APR-1990 20:41 |
|          | Tc-99    | n/a     | ug/   |            | SE LEIDECKER |               | 18-APR-1990 20:41 |
|          | Th-230   | n/a     | ng/   |            | SE LEIDECKER |               | 18-APR-1990 20:41 |
|          | U        | 2       | ug/G  |            | SE LEIDECKER |               | 18-APR-1990 20:41 |
|          | U-235    | .71     | wt.%  |            | SE LEIDECKER |               | 18-APR-1990 20:41 |

Paducah Gaseous Diffusion Plant Analytical Chemistry Department Results of Analyses

Sample Matrix:

SOLIDS

Customer Sample Number: RC-3882

Lab Sample Number: 900405-204

Date Sample Received: 5-APR-1990

Date Sample Completed: 18-APR-1990

Sample Date:

4-APR-1990 00:00:00

Sampled By: MCK/WRB

Material Description: K-017 APRON (1"- 6")

Project #:

Sampled Prom: K017 C

Sampling Proc:

Comment: 5-POINT COMPOSITE DIRT

| Proc No. | Analysis                                | Result  | Units   | Qualifiers   | Analyst      | Date Analyzed | Date Comple  | ted   |
|----------|---|---------|---------|--------------|--------------|---------------|--------------|-------|
| ******** | *************************************** | ******* | ******* | ************ |              | ************* | ************ |       |
| R        | Np-237                                  | 0       | ng/G    |              | SE LEIDECKER |               | 18-APR-1990  | 20:42 |
|          | Pu-239                                  | n/a     | ng/     |              | SE LEIDECKER |               | 18-APR-1990  | 20:42 |
|          | Tc-99                                   | n/a     | ug/     |              | SE LEIDECKER |               | 18-APR-1990  | 20:42 |
|          | Th-230                                  | n/a     | ng/     |              | SE LEIDECKER |               | 18-APR-1990  | 20:42 |
|          | σ                                       | 2       | ug/G    |              | SE LEIDECKER |               | 18-APR-1990  | 20:42 |
|          | U-235                                   | .71     | Wt.\$   |              | SE LEIDECKER |               | 18-APR-1990  | 20:42 |

Approved By: RE BYRD

Date Approved: 19-APR-1990

Sample Matrix:

Sampled By:

Project #:

Sampling Proc:

Lab Sample Number: 900405-205

Date Sample Completed: 18-APR-1990

MGK/WRB

Paducah Gaseous Diffusion Plant Analytical Chemistry Department Results of Analyses

Customer Name:

Customer Sample Number: RC-3883

Date Sample Received: 5-APR-1990

4-APR-1990 00:00:00 Material Description: K-017 APRON (6"- 12")

Sampled From: K017 A

Comment:

5-PO

TSR Number:

| INT | COMPOSITE | DIRT |  |  |
|-----|-----------|------|--|--|

| Proc No. | Analysis | Result | Units   | Qualifiers | Analyst      | Date Analyzed | Date Completed    |
|----------|----------|--------|---------|------------|--------------|---------------|-------------------|
|          |          |        | ======= |            |              |               |                   |
| R        | Np-237   | 0      | ng/G    |            | SE LEIDECKER |               | 18-APR-1990 20:43 |
|          | Pu-239   | n/a    | ng/     |            | SE LEIDECKER |               | 18-APR-1990 20:43 |
|          | Tc-99    | n/a    | ug/     |            | SE LEIDECKER |               | 18-APR-1990 20:43 |
|          | Th-230   | n/a    | ng/     |            | SE LEIDECKER |               | 18-APR-1990 20:43 |
|          | υ        | 3      | ug/G    |            | SE LEIDECKER |               | 18-APR-1990 20:43 |
|          | U-235    | .70    | wt.%    |            | SE LEIDECKER |               | 18-APR-1990 20:43 |

Paducah Gaseous Diffusion Plant Analytical Chemistry Department Results of Analyses

Customer Name:

ET

Customer Sample Number: RC-3884

Date Sample Received: 5-APR-1990

Sample Date:

4-APR-1990 00:00:00

Material Description: K-017 APRON (6"- 12") Sampled From: K017 B

Sample Matrix:

SOLIDS

Lab Sample Number:

900405-206

Date Sample Completed: 18-APR-1990

MGK/WRB

Project #:

Sampling Proc:

| TSR N | umber: |  |
|-------|--------|--|
|-------|--------|--|

| mment: | 5-POINT | COMPOSITE | DIRT |
|--------|---------|-----------|------|
|        |         |           |      |

| TSR N | umber: |  |
|-------|--------|--|
|-------|--------|--|

| Proc No. | Analysis | Result | Units    | Qualifiers | Analyst      | Date Analyzed | Date Completed    |
|----------|----------|--------|----------|------------|--------------|---------------|-------------------|
|          |          | ****** | ======== |            |              |               |                   |
| R        | Np-237   | 0      | ng/G     |            | SE LEIDECKER |               | 18-APR-1990 20:43 |
|          | Pu-239   | n/a    | ng/      |            | SE LEIDECKER |               | 18-APR-1990 20:43 |
|          | Tc-99    | n/a    | ug/      |            | SE LEIDECKER |               | 18-APR-1990 20:43 |
|          | Th-230   | n/a    | ng/      |            | SE LEIDECKER |               | 18-APR-1990 20:43 |
|          | υ        | 1      | ug/G     |            | SE LEIDECKER |               | 18-APR-1990 20:43 |
|          | U-235    | .71    | wt.%     |            | SE LEIDECKER |               | 18-APR-1990 20:43 |

Paducah Gaseous Diffusion Plant Analytical Chemistry Department Results of Analyses

ET

Customer Sample Number: RC-3885

Date Sample Received: 5-APR-1990

4-APR-1990 00:00:00

Sample Date:

Material Description: K-017 APRON (6"- 12")

Sampled From: K017 C

Comment: 5-POINT COMPOSITE DIRT

Lab Sample Number: 900405-207

Date Sample Completed: 18-APR-1990

Sampled By:

MGK/WRB

Project #: Sampling Proc:

| mber: |
|-------|
|       |

| Proc No.   | Analysis | Result | Units | Qualifiers | Analyst      | Date Analyzed | Date Completed    |
|------------|----------|--------|-------|------------|--------------|---------------|-------------------|
| ========== |          |        |       |            | ********     | **********    |                   |
| R          | Np-237   | 0      | ng/G  |            | SE LEIDECKER |               | 18-APR-1990 20:44 |
|            | Pu-239   | n/a    | ng/   |            | SE LEIDECKER |               | 18-APR-1990 20:44 |
|            | Tc-99    | n/a    | ug/   |            | SE LEIDECKER |               | 18-APR-1990 20:44 |
|            | Th-230   | n/a    | ng/   |            | SE LEIDECKER |               | 18-APR-1990 20:44 |
|            | σ        | 2      | ug/G  |            | SE LEIDECKER |               | 18-APR-1990 20:44 |
|            | U-235    | .71    | wt.%  |            | SE LEIDECKER |               | 18-APR-1990 20:44 |
|            |          |        |       |            |              |               |                   |

Paducah Gaseous Diffusion Plant Analytical Chemistry Department Results of Analyses

Customer Name:

Customer Sample Number: RC-3136

Date Sample Received: 26-OCT-1989

25-OCT-1989 00:00:00

Material Description: CYLINDER YARD H-P SURVEY

Sampled From: C-745

Comment: TSR Number: Sample Matrix:

SOLIDS

Lab Sample Number:

891026-020

Date Sample Completed: 14-DEC-1989

ARH

Sampled By: Project #:

Sampling Proc:

| Proc No. | Analysis | Result | Units    | Qualifiers | Analyst       | Date Analyzed | Date Completed                          |
|----------|----------|--------|----------|------------|---------------|---------------|---|
| ======== |          | *****  | ======== |            | *********     |               | *====================================== |
| R        | Np-237   | <1     | ng/G     |            | JW SHELBOURNE |               | 14-DEC-1989 14:35                       |
|          | U-235    | NA     |          |            | JW SHELBOURNE |               | 14-DEC-1989 14:35                       |
|          | Uranium  | <1     | ug/G     |            | JW SHELBOURNE |               | 14-DEC-1989 14:35                       |

Approved By: JW SHELBOURNE Date Approved: 18-DEC-1989